# CRITIQUE OF WILFRID SELLARS' MATERIALISM

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FOR
OLHA, my mother
KATHI, my wife
SERHII, my son

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ABSTRACT

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# PREFACE

In writing this dissertation, I have worked with the following assumptions. The theses of philosophy seem to exist in the ambience between hypotheses, prescriptions, and descriptions. The ideal would be to have a synoptic view combining these in some acceptable proportions. A good proportion is suggested by Alfred North Whitehead when he writes that metaphysical views should meet an empirical and a logical test. The empirical test is that philosophical theses should apply to experience and should apply adequately; while the logical test is that they should be consistent and coherent with each other. Now although this is a prima facie plausible suggestion, what does it mean? Specifically, what is to be understood by 'experience'? By 'coherence'? By 'adequacy'? And in view of alternative approaches to logic, what is to be understood by 'consistency'? It would seem that if alternative interpretations of these terms are possible, Whitehead's criteria may be met in different ways.

In view of the fact that there are alternative views concerning the task of philosophy, and even alternative views about how to meet agreed on tasks, I see no better way to approach the myriad of philosophical views except through an extensive disjunctive syllogism. By this I mean that the best approach to choosing a philosophical position is to consider all the contending views and eliminate, if possible, all except one. Thus, the situation can be represented formally as: either A or B or C or ... or Z. It is not the case that A or B or C or ... ; therefore Z. It would also be incumbent on the defender of Z to rebut any arguments for the rejection of Z. And likewise a defense of A or B or C or ... should be rebutted.

By adopting this method, one engages dialectically with all philosophers--dead and living. This is the approach which is taken by, among others, Wilfrid Sellars, and perhaps more so by C. D. Broad, especially in his Mind and Its Place in Nature, but most self-consciously and systematically by James Cornman in all his writings.

Since I consider this method of the extended disjunctive syllogism to be the proper way to do philosophy, it may explain my emphasis on locating the views of Sellars in some rubric or other. Although my ideal would be to emulate the writings of Cornman in which there is meticulous care given to meeting the challenge of every alternative position, I have avoided such widespread confrontations. For example, I have avoided facing Broad's basic alternatives to the place of mind in nature, which he gives as Monism and Dualism; and within Monisms he lists the positions of Mentalism, Materialism, and Neutral Monism. I have opted to limit my inquiry to the question of which variety of Materialism is most viable. In short, I have stayed as close as possible to the alternatives which are close to Sellars' position. And I have elaborated on those aspects of Sellars' philosophy which I have found to be significant, revolutionary, or wrong. The result is that my dialectical examination of Sellars' position is geared to what may be viewed as the straightening of Sellars' bent posture.

# INTRODUCTION

This manuscript is a critical commentary on the philosophy of Wilfrid Sellars. By a critical commentary I have in mind the sort of task which Sellars himself employs when dealing with the history of philosophy. Sellars in his examination of philosophies and philosophers sets out to discover the truth, that is, to do philosophy. The focusing on the views of a particular philosopher is meant to provide a counterpoint to one's own views. The examined philosopher provides an occasion for developing one's own philosophy, and this is especially rewarding if the examined philosophy has verisimilitude, as does that of Wilfrid Sellars. The conclusions I reach are very close to Sellars' own -- so close, in fact, that I am not certain whether what I am offering as correction are of things I am only misinterpreting.

What is philosophy? Sellars put it succinctly as the attempt to understand how things, in the broadest sense, hang together, in the broadest sense. A little fleshing out of this leads us to the characterization of philosophy as the attempt to systematize a categorial scheme. According to Sellars we have two categorial schemes which need to be reconciled: one is the inherited product of common sense, which Sellars calls the Manifest Image; the other is the scheme of microscience, which in its ideal limit is called the Scientific Image.

Sellars is speculating that theoretical science -- which for him is the measure of what exists -- is heading towards an ontology of absolute processes; and he is further speculating that this ontology must include new types of emergent entities, called 'sensa', which are to be the counterparts of human sensations. All things in the universe are to be understood as constituted by an interplay of these and other absolute processes. Such a view is a variety of what is called Emergent Materialism: a position defended by, among others, Sellars' own father, Roy Wood Sellars, and C. D. Broad.[1] Dialectical Materialism seems to be another variety.

But because of ambiguity in the term 'materialism', and because current usage is to view materialism either as a psychophysical identity thesis, or as a reduction thesis, or as an eliminative thesis -- none of which characterize Sellars' variety of materialism -- there is a need to clarify the sense in which Sellars is a materialist. Specifically, Sellars' materialism requires a distinction between two kinds of physical (or material) properties. But precisely because of the presence of this distinction, two commentators, James Cornman and William Robinson, have argued that Sellars is not a materialist, but a dualist. I explain Sellars' distinction between the two kinds of physical properties and defend his version of materialism from such criticisms.

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[1] I mention C. D. Broad here for two reasons. The first is that Broad does defend, what he himself calls, Emergent Materialism. In the concluding chapter of The Mind and Its Place in Nature (Routledge and Kegan Paul, 1925; Paterson, New Jersey: Littlefield, Adams & Co., 1960), he goes through what he takes to be an exhaustive catalogue of theories about the place of mind in nature, and concludes on page 653: "And, on all the evidence which is available to me, which I have tried to state as fairly as I can to the reader in the course of this book, I judge the most likely view to be some form of the Compound Theory which is compatible with Emergent Materialism."

The second reason for mentioning Broad is that the crux of Sellars' ontology seems to rely rather heavily on Broad's Examination of McTaggart's Philosophy, vol. 1 (London: Cambridge University Press, 1933). This work is cited by Sellars in his "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981). He notes that in the Examination "Broad introduces the concept of what he calls 'absolute processes'(48)", and that Sellars' own account of the 'phenomenon of the specious present', "shares features with many other accounts and, in particular, with that offered by C. D. Broad in his reply to his critics [The Philosophy of C. D. Broad, ed. Paul A. Schilpp (Evanston, IL: Northwestern Univ., 1960)]. My account was developed independently of the latter, though not, of course, of his classic formulation in the Examination of McTaggart's Philosophy (60, #128)."

The justification for Sellars' ontological claims requires grounding in epistemology, whose history can be characterized by 'the quest for certainty' (to borrow a title of John Dewey's book).[2] Historically such certainties were claimed for both *a priori* and *a posteriori* judgments. However, since Sellars is primarily concerned with the ontology of physical objects, persons, and their properties, his major concern is with the availability of *a posteriori*, empirical claims as foundational for empirical knowledge. Such empirical foundational certainties were attributed to elementary sense experiences--variously called 'sense impressions', 'sensory intuitions', 'sensations', or, characteristically in the present century, 'sense data', 'sensa', and, currently, 'qualia'. Knowledge of sense data, it was claimed, is available through an analysis of perception. Sellars denies this claim. To think otherwise, for him, is to embrace a myth: the myth of the given in knowledge. Thus, the conclusion can be drawn that for Sellars empirical knowledge has no certain, privileged empirical foundations. I will agree that these foundations are not certain, but I will argue that they are indeed privileged.

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[2] John Dewey, *The Quest for Certainty* (1929; New York: Capricorn Books, 1960).

As to ontology, in order to defend Emergent Materialism, Sellars has to overcome two ontological difficulties. He has to provide a place for physical objects and persons in the scheme of the theoretical entities of science. The latter problem, which is the mind-body problem, requires an account of thoughts, sensations, and free will in a scientific framework. To make his case, Sellars provides a behavioristic account of language learning and of how we acquire introspective knowledge of our mental acts and states, which are conveniently grouped into thoughts and sensations. Introspective knowledge is rendered as a theoretical extension of a publicly observable base. As concerns thoughts, Sellars sees no problem with them for materialism: thoughts are, on his view, functional states of some unspecified medium or other. Talk of thoughts is, thus, ontologically neutral; and because of this, the medium of thoughts could be--and is for Sellars--the neurophysiological activity of a living brain.

It is otherwise with sensations. Unlike many contemporary Materialists who either deny the existence of sensations as objects of introspection, or who try to reduce sensation talk to talk of behavioral dispositions, or who would eliminate sensation talk altogether, Sellars acknowledges unreduced introspective knowledge of sensations--a knowledge which, however, is not available through an analysis of perceptions. Consequently, this requires giving them a twofold theoretical status: first, as adverbially understood sense impressions in the Manifest Image (roughly, the common sense framework); and then, as 'sensa' in the Scientific Image (roughly, an ideal scientific framework) consisting of absolute processes. As to free will--a problem I will not discuss--Sellars adopts, what is called, a compatibilist position.[3]

In a rough way, this is how I see the broad features of Sellars' philosophy. Do I agree with his conclusions and arguments? I agree with the final ontological conclusion that the universe consists of physical (material) absolute processes, but I do not agree with some of the intermediate ontological and epistemological claims. One disagreement concerns the epistemological availability of phenomenal sense data. I believe that empirical knowledge has, contrary to Sellars, foundations in the sensing of sense data. But no major ontological difference with Sellars over the Realism/Idealism (Phenomenalism) controversy follows from this. For example, the availability of sense data is a necessary--though not a sufficient--condition

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[3] See Wilfrid Sellars, "Fatalism and Determinism," in Freedom and Determinism, ed. Keith Lehrer (New York: Random House, 1966); Robert J. Richards, "Sellars' Kantian Perspective on the Compatibility of Freedom and Determinism," Southern Journal of Philosophy 11 (1973): 228-236; Alan Donagan, "Determinism and Freedom: Sellars and the Reconciliation Thesis," in Action, Knowledge and Reality, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Co., 1975); Wilfrid Sellars, "Reply to Alan Donagan," Philosophical Studies 27 (1975): 149-84. See also Gary Gutting, "Action and Freedom," in The Synoptic Vision: Essays on the Philosophy of Wilfrid Sellars, ed. C. F. Delaney, Michael J. Loux, Gary Gutting, W. David Solomon (University of Notre Dame Press, 1977).

for Phenomenalism, and, therefore, Phenomenalism can be rejected on other grounds. I agree with Sellars in accepting some form of Realism, and could call my version Theoretical Realism to emphasize the theoretical nature of physical objects; but I will opt for calling it Animal Realism to echo George Santayana's sentiments about 'animal faith'. But this as yet does not provide me with any radical difference with Sellars. He too gives the conceptual framework of common sense a "theoretical" status in his own way.

However when the issue turns to the methodological and epistemological priority of the common sense versus the scientific conceptual framework, I start to balk. For Sellars the Manifest Image, which is his regimented rendition of a common sense framework, is in principle replaceable through conceptual retraining. I have two difficulties with this thesis. The first is that I don't know what Sellars has in mind by this retraining. As far as I know, he never fully explains this thesis. The second is that I am convinced that we have a pre-conceptual representation of the universe as composed of something like physical objects, and I am further convinced that this pre-conceptual representation is an unconscious and involuntary construction of animal representation. So even though we can recategorize the universe in terms of some categories, as, for example, shifting from an animistic view of the universe to a de-personalized one, we cannot recategorize it by de-physicalizing it. I can conceive of a de-physicalized universe, but I cannot imagine it. And I would immediately add that our common sense perceptual universe is limited by what Kant called the schemata of the productive imagination. But if there is an unalterable core of physicalism in common sense perception, this would account in part for our ability to understand the language, writings, and behavior of all sane human beings in all times and places--despite Quine's thesis of the indeterminacy of radical translation[4] to the contrary. So the issue which separates me from Sellars, besides the epistemological availability of the awareness of sense data as foundational for empirical knowledge, is the belief in a pre-conceptual system of representations which restrains us from eliminating our view of physical objects.

This dissertation is my effort to state this dialectical confrontation with Sellars. My first task will be to exposit the nature of Sellars' Materialism, and to consider some difficulties with it. After this, in the next chapter, I examine his view of common sense, which he calls the Manifest Image. My objection here is that the Manifest Image should not be strictly identified with a common sense view. My reason is that common sense recognizes the existence of absolute processes (or events); the Manifest Image does not. I require the recognition of absolute processes at the common sense level to provide a model for sense data. Sellars acknowledges something like this rather late in his writings when he tries to reconcile his particular adverbial theory of sensing with classical sense data theories. But even here he thinks he is revising the Manifest Image rather than working in it.

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[4] The locus classicus for W. V. O. Quine's position is his Word and Object (Cambridge: M.I.T. Press, 1960), ch. 2. I accept John Searle's assessment of Quine's position on the indeterminacy of translation and inscrutability of reference as a reductio ad absurdum of Quine's specific behavioristic assumptions. See John Searle, "Indeterminacy, Empiricism, and the First Person," The Journal of Philosophy 84, no. 3 (March 1987): 123-146.

The next issue I grapple with is the mind-body problems. I say 'problems' because Sellars subdivides the mind-body problem into an intentionality-body and a sensorium-body problem.[5]

The intentionality-body problem requires a discussion of language, thought, and semantics; and their grounding in a behavioristic methodology. My dissatisfaction with Sellars' approach is that he is not consistently clear in making a distinction between non-conceptual and conceptual thoughts. This has resulted in a misunderstanding of Sellars by his critics, and perhaps has even introduced some unclarity for Sellars himself. The remedy here is to focus on the distinction between what Sellars of late has called a 'representational system', which he credits to animals; and a conceptual representation system, which only language users possess. Once this distinction is pushed to the foreground, two consequences follow--a good one and a bad one.

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[5] "The traditional mind-body problem has two dimensions which have often been run together--or, at least, not carefully distinguished: (1) What is the relation of sensations to physical states of the body? (2) What is the relation of conceptual states (thinking, inner speech) to physical states of the body? It should not be assumed that these two dimensions of the mind-body problem admit of the same type of solution." W. Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Company, Inc., 1975), 318, #6.

The good one is that it becomes possible to see a compatibility between Sellars' view on thoughts with those of many of his opponents, including C. I. Lewis, E. Hall, R. Chisholm, R. Firth, R. Clark, A. Marras, Alan Goldman, and T. Russman. The bad one is that the recognition of the two representational systems creates a tension in Sellars' philosophy, or, I should rather say, an incoherence. What I have in mind is that the existence of a pre-conceptual representational system begs to be put in the service of the construction of an 'animal world' composed of something like physical objects. But in that case Sellars' claim that the Manifest Image is replaceable, I believe, must be abandoned. And if that thesis is abandoned, then some presupposition of that thesis too must be abandoned. The most vulnerable presupposition, I suspect, is Sellars' view on the so-called 'bridge laws' or 'correspondence rules' in theoretical science, which he understands as candidate re-definitions. The alternative interpretation which has merit is to view them as causal laws.

This brings me to the problem about the foundations of empirical knowledge and Sellars' rejection of The Given as a myth. I examine Laurence Bonjour's argument against foundationalism. I note that he fails to present the correct logical form of a plausible foundationalism. The correct form is neither a case of deduction or simple induction, but a form of what Charles S. Peirce called 'abduction'.

Bonjour also fails to elaborate on the possibility of giving an _a priori_ justification of empirical knowledge. Such an _a priori_ justification seems to be implicit in both Chisholm and Sellars himself.

I distinguish Pseudo Foundationalism from Genuine Foundationalism, and agree with Sellars that Pseudo Foundationalism is a myth. As I am using these phrases, Pseudo Foundationalism relies on a physicalistic language for foundations; while Genuine Foundationalism relies on phenomenal reports. Sellars argues that phenomenal reports as foundational for physicalistic language are unavailable. I disagree, and argue for the availability of phenomenal reports and hence of Genuine Foundationalism.

To get at the root of my disagreement with Sellars, I try to disambiguate the notion of the Given in Sellars. And to pinpoint the problem, I examine and reject William Robinson's argument that The Given is not a myth. Robinson's analysis of Sellars' position seems to be flawed by some misunderstandings. Despite this, Robinson's position ultimately relies on the claim that there is such a phenomenon as a counting use of concepts which does not presuppose a classificatory use of concepts. I argue that he is mistaken about this.

I accept the given as understood by C. I. Lewis and defended by R. Firth. It turns out that the Given is, as far as I can tell, simply the awareness of a world through a non-conceptual representational system, or what Lewis called 'sense meaning'.

Next I take up the sensorium-body problem in the context of an account of perception. The word "account" is here doing double service for two separate problems. One is to give an explanation of perceptual reports; the other to give an analysis. I agree with Sellars about explanations, but not with his analyses of perceptual reports. His analyses are not reductive enough for me. I side here with the position of Firth in their debate about this issue. Furthermore, I disagree with Sellars about the, so-called, sense-datum inference. Sellars believes with Chisholm and Cornman that it is a fallacy. I side here with Frank Jackson who accepts the validity of this inference.

In addition, Sellars has an argument for the conceptual unavailability of a model for sense data. His argument seems to rely on a distinction between essential and accidental features of a model. I reject his argument on the ground that what he takes to be essential connections are in fact accidental.

I also have a disagreement with Sellars about the intentionality of sense data. He says that they are nonintentional. But in saying this he conflates the intentionality of conceptual representations with the intentionality of non-conceptual representations. By contrast, I side with Romane Clark and Everett Hall in claiming that sense data are constituents of non-conceptual representations.

I also find Sellars', so-called, 'adverbial' approach to be either unacceptable, or acceptable if it can be made equivalent to a version of the sense data approach, as Sellars tries to do. The reconciliation of the sense data and the (adverbial) sensing approach relies on the use of a new model of subjectless sentences, as illustrated by the form 'It is thundering'. I applaud this strategy. But immediately the question can be raised: From which conceptual framework does this model come from? It cannot be the Manifest Image, since that Image is based on a substance ontology. So the implication is that we have access to another conceptual framework, which includes an ontology of processes. I call this conceptual framework the Common Sense framework. It includes the Manifest Image as a part, but it is not identical to it.

Having made my case for sense data and foundational knowledge, I defend Animal Realism. As I am using this phrase, it is a position consisting of two theses. The first thesis is that realism about the external world is correct. The second thesis is that our representation of the world is a product of two innate faculties: one is a faculty of receptivity and the other is faculty of schematization. These faculties are evolutionary products which are necessary for the possibility of survival of all animals which must learn to cope with their environment.

I assume that animals are capable of making unconscious, involuntary inferences. The psychologist, R. Gregory, talks about perception as hypothesis formation. I agree with this.

Does Sellars disagree? No matter how Sellars answers, the tension between the conceptual and the non-conceptual representational systems again must be faced. If there is a non-conceptual representational system, then it is the medium in which perceptual hypothesis are constructed. But if so, it would seem that conceptual representations cannot replace these pre-conceptual constructions; but can, at best, only supplement them.

My emphasis on the non-conceptual and the conceptual representational systems is meant to reveal the major tension in Sellars' system. In his polemics against the Given, Sellars seems to be rejecting both conceptual and non-conceptual representations as given. But in his latest writings he is willing to grant to animals non-conceptual representations--some of which are learned and some of which may be innate. Of these learned animal representational systems, it seems that their nature is the product of invariable animal capacities and impressions. The suggestion is that though the perceptions of animals are constructed, the construction is more or less invariable. In that sense, we could say that despite the need for construction, the product of construction is relatively invariable; hence, given. If this is a faithful reconstruction of Sellars' position, then there is a tension between two sorts of givens in Sellars' system, i.e., a tension between the claim that there is no given whatsoever and the claim that animal representations are given. Perhaps the tension can be alleviated by attributing to Sellars the claim that there is no conceptual given and the claim that there is a pre-conceptual given.

If that is Sellars' position (which it very well may be), then there is a question about the extent of conceptual relativity if an invariant pre-conceptual representational system is indeed given.

Pressing Sellars on this issue has repercussions on Sellars' global problem of reconciling the Manifest and the Scientific Images. If animal representation is a limiting factor in the construction of the Manifest Image, then there may be more irreplaceable aspects of the Image than Sellars is willing to grant. For one, Sellars believes that the perception of colors as characterizing the external world is a case of mis-perception. The implication is that a new generation of children could be retrained to conceptualize perceptions properly. But on the contrary, if mis-perception is a matter of evolutionary innate animal representation, then the alteration of such perception would not be a matter of reconceptualization or training, but a matter of genetic engineering or "rewiring" of the brain.

The upshot of my disagreement with Sellars about the replacement of the Manifest Image is that I am committed to a more conservative view of science as built on unalterable categorial foundations, or, in Sellars' terminology, I am committed to a form of the Given.

# THE OUTLINE

As a guide for the reader, I will outline the presentation of my topics and the general forms of the arguments.

The first chapter is concerned with classifying Sellars' position within the traditional epistemological and ontological rubrics. However, since the traditional rubrics are prone to ambiguity and vagueness I offer definitions for key classes. My claim is that Sellars is a Non-Reductive Scientific Materialist.

The second chapter introduces the major problem for Sellars' Materialism. This can be seen from a global or a local perspective. The global problem is to reconcile two apparently incompatible conceptual frameworks: the Manifest and the Scientific Image. The local problem is to solve the mind-body problem. My objection at this level is that Sellars tends to write as if the Manifest Image were identical to a Common Sense Image. In writing reflectively about this, he does not make this conflation; but in his unreflective use of the Manifest Image he does tend to make the conflation. My reason for not identifying the two Images is that the Common Sense Image recognizes the existence of irreducible absolute processes, while the Manifest Image works with an Aristotelian substance ontology. I argue that Sellars' attempt to reduce "event" talk to "substance" talk fails in the case of absolute processes. Moreover, talk of unreduced absolute processes is needed as a model for understanding and explaining perceptions (a topic covered in chapter 9). So there is an apparent incoherence between Sellars' claim that talk of absolute processes can be reduced and his appeal to such talk as a model for understanding perception.

In the third chapter I discuss the topic of ontological commitment. Two aspects of this discussion are important. The first is that Quine's criterion of ontological commitment as determined by the range of the variables is rejected by Sellars on the basis of how quantification is to be interpreted. Quine has what is called an objectual or referential interpretation of quantifiers, while Sellars has what is called a substitutional interpretation. The second point is probably best put in the following way. For Quine ontological commitment--relative to some conceptual framework--is determined by variables, while for Sellars by names.

But there is a wider issue to be faced: which conceptual framework to adopt? Ontological commitment will then become relative to this wider concern.

In the fourth chapter I distinguish the subproblems for the reconciliation of the global Manifest-Scientific Image distinction, and the local subproblems for the mind-body problem. For the global problem, I propose that we substitute for the Manifest Image a Common Sense Image which has a mixed ontology of events and substances. For the local problem, I note the distinction between the sensorium-body and the intentionality-body subproblems.

In chapter five I focus on the intentionality-body problem. My main concern is to demarcate a conceptual from a non-conceptual intentionality. The source of this demarcation is in Sellars' own writings. I believe that a large portion of the polemics over intentionality--and here I have in mind Sellars' polemics with Lewis, Chisholm, and Firth--can be accounted for by a failure to demarcate non-conceptual from conceptual intentionality.

In chapter six I try to locate Sellars' position in current philosophical psychology. Sellars defends both functionalism and introspection. He tries to give a theoretical account of our introspective knowledge of thoughts and sensations on a behavioristic basis. My conclusions are that his argument does not go through and that perhaps all non-overtly linguistic thoughts are non-conceptual.

In the seventh chapter I offer a transcendental argument for a version of epistemological foundationalism. My main concern is to answer the most serious objections against foundationalism, such as those of Laurence Bonjour and Nelson Goodman.

In the eight chapter I clarify the concept of the Given in Sellars. And I both defend and criticize his position on the Given. I defend Sellars' argument for the rejection of the Given from William Robinson's attack; but I defend C. I. Lewis' position on the Given from Sellars' attack. In the Lewis-Sellars case, the issue about the Given is muddled by a failure to make a distinction between conceptual and non-conceptual intentionality.

In the ninth chapter I deal with the epistemological and the ontological problems of perception. The conclusion I reach on the epistemological problem is that sensa are given through a phenomenological reduction. The conclusion I reach on the ontological problem is that Sellars is correct in his view that sensa exist as causal mediatory absolute processes in perception.

In the tenth, concluding chapter, I spell out the implications of my disagreement with Sellars on epistemology. The main implication is that there is an evolutionarily produced genetic make-up in those animals, at least, which rely on learning for survival such that they are endowed with innately structured intractable representational systems. I call this view Animal Realism. This view has the further implication of restricting the range of conceptual alteration--a thesis which Sellars apparently denies.

As concerns my overall assessment of Sellars' attempt at a synoptic system of philosophy, my conclusion, at best, is that Sellars' position appears to be incoherent in several places. I say "appears" rather than "is" with emphasis for two reasons. The first reason is that Sellars is a self-conscious dialectical writer in the Hegelian sense. It could very well be the case that the aspects of his system which I find to be incoherent should be seen, from a more sympathetic perspective, as the theses and antitheses which are yet to be overcome. If that is the case, then my conclusion will have to take the form that Sellars' system still needs to be pushed to a synthesis. The second reason for my saying that there is an appearance of incoherence rather than an actual incoherence is that even if (and this is a big "if") Sellars' himself does not recognize the need to reconcile the apparent incoherences, we, the readers, can. I would add that the incoherences can be reconciled by adding various qualifiers, such as a restriction to a particular language (conceptual framework), or a particular level of sentient life. I cite these kinds of qualifiers because they are the sorts of qualifiers Sellars himself uses, and it seems to me that these are the kinds of qualifiers which would in fact be needed to overcome the apparent incoherences which I find in Sellars.

Having said this by way of introduction, the dissertation's main charge (see chapter 5) is that Sellars has been interpreted as arguing for the thesis that there is no awareness independently of a conceptual framework, a claim which is equivalent from Sellars' perspective to the claim that there is no awareness independently of a conventional language. However, in some of his more recent essays, Sellars argues for animal representational systems which are independent of conventional languages, and which are possessed by human beings. Now this distinction is no small point. The distinction throws into a new perspective the epistemological issue of whether empirical knowledge has foundations, and this, then, raises the need for a reinterpretation and a reassessment of Sellars' whole philosophy.

This brings to the forefront something that I have been assuming about Sellars' philosophy, namely, that he has not changed his mind on his fundamental positions in the course of nearly 40 years of writing. If there is a decisive change of mind, it would be his Carus Lectures, delivered in 1978. Laurence Goldstein, for example, has written, "If I'm not much mistaken, these [Carus] Lectures represent a radical change in certain of Sellars's leading ideas, or at least a sharp quickening of their Heracleitean flux."[6] The suspicion that Sellars had changed his mind was well expressed by Jay Rosenberg who wrote: "'What have you done with the real Wilfrid Sellars?' asked a participant in a symposium at which Sellars presented portions of the Carus Lecture materials."[7] Rosenberg's own assessment is: "For while the story Sellars tells in the Carus Lectures is not, I think, radically new and different from that told in his earlier works, it is in those earlier works, I am tempted to say (Sellarsianly) only as the mature oak tree is in the acorn."[8]

I am assuming that Rosenberg is right. This is to say that I have taken all of Sellars' writings as so many fragments of a philosophical system. There are only one or two places where Sellars has expressed a change of mind, and the fact that Sellars in his last writings reaffirms the position of his earliest writings suggests that at least in his own mind he considered all his writings to be elaborations of one system.

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[6] Laurence Goldstein, "The Adverbial Theory of Conceptual Thought," The Monist 65 (1982), 384.

[7] "The Place of Color in the Scheme of Things: A Roadmap to Sellars's Carus Lectures," The Monist 65 (1982), 315.

[8] Ibid.

# CHAPTER 1

# SELLARS' EPISTEMOLOGY AND MATERIALISM

Wilfrid Sellars' main philosophical concern is to provide epistemological backing for a sophisticated version of a Materialistic ontology which will solve the mind-body problem. That Sellars is a Materialist may not be clear because he uses various phrases to label his own and his opponents' views. Following in his father's philosophical footsteps, Sellars calls himself by several labels: Critical Realist, Physical Realist, Evolutionary Naturalist, Scientific Realist, and Materialist.[1] These labels characterize epistemological and ontological views. In this chapter I will describe various epistemological and ontological positions and locate Sellars' position among them.

## I. EPISTEMOLOGY

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[1] "I might point out that the solution of the "mind--body problem" offered in this paper ["A Semantic Solution to the Mind-Body Problem"] is thoroughly in the tradition of Physical Realism." Wilfrid Sellars, "Physical Realism," in Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967), 195.

"How natural, then, and, in a sense, how true to say that Critical Realism, Evolutionary Naturalism, and all that they imply, are part of my paternal inheritance." Ibid., 185.

"I count myself a Scientific Realist." Idem, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 2.

From an epistemological point of view, Sellars wants to distinguish his position from Direct Realism,[2] on the one hand, and Idealism and Phenomenalism, on the other. As a rough approximation, the former holds that in perceptual knowledge we are not only directly confronted by physical objects but we also have a direct knowledge of physical objects; the latter, by contrast, holds that in perceptual knowledge we are directly confronted with sense data and we have knowledge about sense data. Now if we combine the idea that in perceptual knowledge we have a direct perception of sense data, and an indirect perception of physical objects, we get Indirect Realism. Since the traditional form of Indirect Realism is that of the Representative Realism of John Locke--a position which reputedly implies a copy theory of representation[3]-- Sellars wants to distance himself from this view. He calls himself a Critical Realist. This is the view that in perceptual knowledge we are directly confronted (non-cognitively) by sense data, but we have direct knowledge of physical objects.

Now, is 'confrontation' as used above an epistemic concept? Those who believe that it is have been, for the most part, Foundationalists. In fact most philosophers have been Foundationalists in epistemology. Foundationalism is the view that knowledge is justified by basic empirical beliefs which are intuited or given, and which are independently warranted because of privileged access or otherwise. Sellars rejects a version of this view, calling it the Myth of the Given. But the belief in the given has not been limited to empiricists. The belief in the given has also been used by rationalists to argue for a 'mental eye' which is receptive of self-evident or innate truth. So Sellars' attack on the given has a broad target: it includes not only the views of empiricists, but also the views of many rationalists as well. Indeed, the attack is against most Western philosophy.

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[2] It is also called Inspectional Realism, Naive Realism, Naif Realism, and New Realism.

[3] For a convincing argument that Locke did not hold a copy theory of representational perception, see J. L. Mackie, Problems from Locke (Oxford: Clarendon Press, 1976), especially ch. 2.

## II. CONCEPTS

Theories of the given are connected with theories of concept acquisition, and theories about the status of abstract entities and universals generally. Some Materialists, like James Cornman, for example, have tried to view the issue of abstract entities as neutral in regard to Materialism. He writes: "Materialists are not committed to denying the existence of entities such as classes, propositions, universals, and numbers . . ."[4] Not so for Sellars. I believe that Sellars would respond to Cornman by saying that to consider the issue of abstract entities to be neutral is tantamount to not knowing how to handle the topic, and, at best, it is a promissory note to discuss it at some other time. Sellars' own approach is nominalistic. As I understand his nominalism, it is the program of translating all sentences containing reference to abstract entities into sentences which do not.

Sellars notes that historically the Realist position (about universals) was conjoined with a view of an immaterial 'mental eye' which received (or was 'impressed by') abstract entities. Such an argument is presented in Aristotle and Aquinas. It is also accepted, for example, by Mortimer Adler, a contemporary Aristotelian and Thomist, who agrees with the following: "They [Aristotle and Aquinas] posit the immateriality of the conceptual power in order to explain conceptual acts . . ."[5] For Adler this conceptual power in a person entails and is entailed by personal 'contra-causal' freedom of choice, and these together distinguish persons in kind from animals and machines (i.e., computers).[6] The consequences of taking this tack are monumental, as Adler correctly understands:

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[4] James Cornman, Materialism and Sensations (New Haven Yale University Press, 1971), 7.

[5] Mortimer Adler, The Difference of Man and the Difference It Makes (New York: World Publishing Company, 1971), 216.

> man's intellect (i.e., his power of conceptual thought) is the immaterial component in his constitution that makes him a person, requires his special creation, gives him the hope of immortality, and endows him with the freedom of choice.[7]

Realism (about abstract entities), thus,--though not necessarily--may lead, as it does in Adler's case, to the positing of an immaterial principle in the person; and hence is a step toward dualism or idealism. Sellars' nominalism (which I will call Semantical Materialism) is intended as a part of an alternative theory of conceptual thought. And if his alternative theory is successful, then it undermines any argument that would posit the existence of an immaterial principle to explain the human capacity for conceptual thought.

In chapter 5 I will examine in detail Sellars' views on concepts. And though he has much to say on the problem of freedom, I will not examine his views about this, except to repeat that he defends a version of the Compatibilist position.[8]

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[6] Ibid., 271.

[7] Ibid., 287.

[8] See W. Sellars, "Fatalism and Determinism," in _Freedom and Determinism_, ed. Keith Lehrer (New York: Random House, 1966). For a criticism, see Robert J. Richards, "Sellars' Kantian Perspective on the Compatibility of Freedom and Determinism," _Southern Journal of Philosophy_ 11 (1973): 228-236.

## III. ONTOLOGY

The term Realism is also used to label the ontological view which affirms the independent existence of physical and scientific objects; hence Sellars uses the labels Physical Realism and Scientific Realism to contrast his view with various forms of Idealism and Phenomenalism, which deny an independent existence to physical and scientific objects. Idealism holds that only mind or minds exist independently; while Phenomenalism (Neutral Monism) holds that only phenomena (sensa) exist independently.

As so far characterized, Realism is compatible with Dualism, the view that minds and bodies exist independently of each other; and it is compatible with Epiphenomenalism, the view that the mental is dependent on the physical, but not vice versa.

### A. NATURALISM

This clarification of terms brings me to the terms Naturalism and Materialism. Elaborating on the idea of Physical Realism, Sellars points out that it "claims to continue and revitalize the great naturalistic and materialistic perspectives of the past."[9] The two terms

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[9] Sellars, "Physical Realism," 6.

Naturalism and Materialism are not equivalent. Materialism, at best, is a type of Naturalism. The reason for this is that Naturalism is characterized by a precept not to believe in the existence of things not natural (and the natural is usually identified with the objects of scientific study). Naturalism, as it is usually conceived, is a faith or guiding principle holding that those things which exist in the universe are accessible only through nature, which means through the sciences. Naturalism does not have a specific ontology, and is compatible with various philosophies of science. For example, both Positivists and Materialists are Naturalists, and there have also been Panpsychists who were Naturalists. It is clear, however, that for Sellars Naturalism should exclude the existence of anything supernatural, e.g., the existence of God, souls, or any other "spiritual" beings, understood to be invisible disembodied persons or quasi-persons (possessing intentionality).[10]

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[10] However, I allow for the interpretation of the words "God", "soul", and "spirit" in senses which would make them compatible with Materialism. "God," for example, if defined as "the asymptotic categorial system" (if one is possible) would be compatible with Materialism. Also Samuel Alexander's definition of "deity" as the stage of evolution after humanity is compatible with Materialism. See his Space, Time, and Deity (London: Macmillan, 1920; New York: Dover, 1966). However, such approaches involve extra-ordinary definitions, which to my knowledge few philosophers give. A notable case is that of Baruch Spinoza who identified God with the universe. But, as could be expected, such (non-teleological) pantheism was quickly branded by his contemporaries as a Materialism.

# IV. MATERIALISM

Sellars' ontological commitment is expressed by the term Materialism. But because there is controversy about how to define a 'physical' (or 'material') property, and the characterization of Sellars' brand of Materialism relies on this, the definition of 'physical' will be discussed in due course.

On the one hand, Sellars clearly thinks of himself as a Materialist in the old, classical tradition in holding that what primarily exists is matter.[11] But he vacillates between calling this position Materialism or

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[11] The idea of primacy is captured by the current use of the term "supervenience." If A is supervenient on B, then for any x which has the same properties as B, x will have the same properties as A. Using the concept of supervenience, Materialism is the view which claims that psychological phenomena are supervenient on physical phenomena. This is to say that any two physical objects with the same physical properties will have the same psychological (mental) properties.

It appears that currently many philosophers are willing to define Materialism in terms of supervenience--a practice which stems from D. Davidson's essay "Mental Events," in Experience and Theory, ed. L. Foster and J. W. Swanson (London: Duckworth, 1970). For example, Jaegwon Kim puts it this way: "Acceptance or rejection of the supervenience of the mental on the physical leads to the most basic division between theories of the mind-body relation: theories that accept psychophysical supervenience are fundamentally materialist, and those that reject it are fundamentally anti-materialist." "Concepts of Supervenience," Philosophy and Phenomenological Research 45 (1984), 156. Terence Horgan follows suit: "An increasing number of philosophers maintain nowadays that the metaphysical doctrine of Materialism is best formulated as a thesis of general supervenience." "Supervenient Qualia," The Philosophical Review 96 (1987), 491.

Naturalism. This vacillation is due to reasons similar to his father's:

> Now my father . . . has been both willing and not willing to classify himself as a materialist. Rightly so, for any such blanket term covers a spectrum of views ranging from the sophisticated to the absurd.[12]

R. W. Sellars was reluctant to use the term Materialism because it suggested a Mechanistic Materialism tied to the view that matter is passive, inert--responding to, but not initializing pushes and pulls. The model for classical Materialism was the science of mechanics. But if a fundamental science, such as physics, is to provide the model of matter, then the characteristics of matter should include those recognized by contemporary physics. Thus matter is described as having a location in space and time, as possessing mass, and as having four fundamental forces: gravitational forces, electromagnetic forces, and weak and strong nuclear forces. R. W. Sellars' view of matter was based in intent on a dynamic view of matter--a matter, not as inert, but as containing various known and discoverable forces. Although, at first, he preferred the label Naturalist, he was not satisfied with its ontological neutrality, and switched back to using the label Materialist.

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[12] Wilfrid Sellars, "The Double-Knowledge Approach to the Mind-Body Problem," The New Scholasticism 45 (1971), 272.

Indeed the term 'materialism' is ambiguous and vague. I would define Materialism disjunctively as the view that only matter exists (Extreme Materialism), or as the view that only matter exists primarily (Moderate Materialism). Epiphenomenalism[13] is then a type of Moderate Materialism. Wilfrid Sellars is an Extreme Materialist.

However, under Extreme Materialism we can subsume the following species: Reductive Materialism, Eliminative Materialism, and Holistic (Emergentist) Materialism. These can be distinguished in the context of how they respond to the sensation-brain identity thesis (formulated by U. T. Place).[14] Reductive Materialism accepts the identity thesis; Eliminative Materialism (e.g., R. Rorty, P. Fayerabend, and P. Churchland) dispenses with sensations as theoretical fictions; while Holistic Materialism either introduces a new distinction in physical entities and identifies sensation with the new postulated physical entities (Sellars' version), or introduces properties of wholes not possessed by the parts--a view accepted by, among others, James Cornman, but rejected by Sellars.

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[13] An epiphenomenon, a term coined by Thomas H. Huxley, is an event which is itself caused but which does not have the power to cause any other event. The belief in epiphenomena is ascribed to Hobbes, Huxley, and sometimes to Lenin.

[14] U. T. Place, "Is Consciousness a Brain Process?" in The Mind-Brain Identity Theory, ed. C. V. Borst (London: Macmillan Press, 1970): 42-51.

Most contemporary Materialists--at least the prominent ones like D. Armstrong, V. W. O. Quine, R. Rorty, G. Ryle, and J. J. Smart--have tried to exclude the existence of "mental" entities from Materialism either by identifying them with neurological states or by eliminating them, i.e., by defending versions of Reductive or Eliminative Materialism. Not so Sellars: he has been a staunch defender of the existence of ineliminable and irreducible sensa; and for this reason philosophers like J. Cornman and W. Robinson refuse to characterize Sellars as a Materialist, and would probably classify him as a Dualist. In my terminology and Sellars', however, dualism is not necessarily incompatible with Materialism, depending, of course, on the nature of the dualism. Sellars' position is not a dualism which contrasts mental substances with physical substances; rather it is a dualism which distinguishes between physical states which are studied by (contemporary) physics and another set of physical states---i.e., mental states--which (as yet) are not. It is a form of Emergent (or Holistic) Materialism (i.e., Evolutionary Naturalism).

> According to evolutionary naturalism, physical systems having certain complex structures are endowed with properties not found in less complex systems, properties which, in the case of living organisms, for example, do not require the postulation of controlling psychoids or entelechies.[15]

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[15] Sellars, "Double," 282.

The term 'evolutionary' is intended to capture the belief that in nature new, emergent laws and properties occur. This view contrasts with one that holds that the laws and properties studied by contemporary physics are exhaustive of nature and that the so called "emergent" laws (e.g., chemical laws) and properties (e.g., colors) are actually either identical or reducible to physical laws and properties. And if they are not, the contrasting view holds, then these so-called emergent properties (events) are, in the words of Herbert Feigl, nomological danglers; or, worse, nomological violators.[16] So there is a prevalent use of the term 'materialism' which excludes the belief in emergent laws and properties. An explicit expression of this view is found, for example, in the writings of J. J. C. Smart:

> my definition will in some respects be narrower than those of some who have called themselves 'materialists'. I wish to lay down that it is incompatible with materialism that there should be any irreducibly 'emergent' laws or properties, say in biology or psychology.[17]

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[16] A nomological dangler, I take it, is an event for which there is no lawlike description; while a nomological violator is an event which violates a law. The latter charge is made by James Cornman in "Nonreductive Identity Thesis about Mind and Body," in Reason and Responsibility, 5th ed., edited by Joel Feinberg (Belmont. Cal.: Wadsworth Publishing Company, 1981). His specific charge is that nonreduced mental events would violate either the principle of the conservation of mass-energy or the principle of the conservation of linear-momentum.

[17] J. J. C. Smart, "Materialism," in The Mind/Brain Identity Theory: 159-160.

And so, because the current fashion is to use the term 'materialism' synonymously with Reductive or Eliminative Materialism, Sellars writes, "I am so surprised by some of the views of the new, new Materialists, that until the dust settles, I prefer the term 'Naturalism'."[18] He writes "new, new Materialists" because his father had at times referred to himself as a New Materialist.[19]

But perhaps Sellars' current reluctance to use the term 'materialism' stems from his polemic with James Cornman, who wrote, "I wish to examine Sellars' reasons for thinking that materialism is mistaken."[20] To which Sellars replied, "nowhere have I expressed the opinion that materialism is mistaken."[21] Sellars went on to locate the reason Cornman refused to call him a materialist: "Cornman clearly thinks that a position is materialistic if the only objects it countenances are 'physical'," and immediately adds,

> I would not object to this criterion if a clear sense were given to the term 'physical.' Without it, con-

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[18] Wilfrid Sellars, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 2.

[19] Roy Wood Sellars, Critical Realism: A Study of the Nature and Conditions of Knowledge (Chicago: Rand-McNally Co., 1916), preface.

[20] Cornman, James. "Sellars, Scientific Realism and Sensa," Review of Metaphysics 23 (1969-1970), 421.

[21] Wilfrid Sellars, "Seeing, Sense Impressions, and Sensa: A Reply to Cornman," The Review of Metaphysics 24 (1970-1971), 402.

> troversies over who is and who is not a materialist may or may not be full of sound and fury, but they certainly signify nothing.[22]

## A. THE PHYSICAL$_1$-PHYSICAL$_2$ DISTINCTION

Sellars is an Extreme Materialist, countenancing only physical objects, physical events, and physical properties. But he makes a distinction between physical$_1$ and physical$_2$ properties. This distinction was, as far as I can tell, first introduced by Herbert Feigl[23] and then used by Sellars and Meehl in their co-authored paper "Concept of Emergence." This is how they formulated the distinction:

> Physical$_1$: an event or entity is physical$_1$ if it belongs in the space-time network.
>
> Physical$_2$: an event or entity is physical$_2$ if it is definable in terms of theoretical primitives adequate to describe completely the actual states though not necessarily the potentialities of the universe before the appearance of life.[24]

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[22] Ibid., 403.

[23] Herbert Feigl, The "Mental" and the "Physical" (Minneapolis: University of Minnesota Press, 1967).

[24] Wilfrid Sellars and Paul Meehl, "The Concept of Emergence," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl and Michael Scriven (Minneapolis: University of Minnesota Press, 1956), 252.

William Robinson point out, correctly, that the definition of a physical$_2$ property should contain the phrase "before the appearance of sentient life" rather than "before the appearance of life." Otherwise, Sellars would require a tripart distinction between a lifeless property, a property of life, and a property of sentience. See his "Sellarsian Materialism," Philosophy of Science 49 (1982), Elsewhere, in his Carus Lectures, Sellars gives a more qualified formulation for the term "physical$_2$":

> Roughly, those features of objects are physical$_2$, which are, in principle, definable in terms of attributes exemplified in the world before the appearance of sentient organisms, i.e., attributes necessary and sufficient to describe and explain the behavior of 'merely material' things.[25]

Sellars wants to distinguish a broad and a narrow sense of the term "physical": "physical$_1$" and "physical$_2$" respectively. His broad sense (physical$_1$) was, I take it, initially meant to serve in distinguishing all those views which claimed that only those entities or events exist which are in space and time. But such a minimal definition of a physical trait would make the Epiphenomenalism of someone like Thomas Hobbes[26] a Materialistic view. So, in the Carus Lectures, where Sellars is explicitly interested in contrasting his view with Epiphenomenalism, he restricts the definition of the term "physical" to exclude epiphenomena. To do this he adds a third trait that a physical$_1$ entity or event must have: "Physical$_1$,

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[25] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 89.

[26] Thomas Hobbes' writing actually lends itself to two interpretations. In some passages he writes that sensations are identical to motions of parts of the body--this would make him a Reductive Materialist; but in other pasages he writes that sensations are caused by motions of parts of the body--this would make him an Epiphenomenalist.

features . . . are any which belong in the causal order."[27] And immediately adds that this would be in conformity with "a basic metaphysical intuition: to be is to make a difference."[28] He compares this to Plato's requirement: "We set up as a satisfactory sort of definition of being, the presence of the power to act or be acted upon in even the slightest degree."[29]

But in view of the debate about causality in quantum theory, the use of the word 'cause' here may be misleading. Sellars wrote: "My remarks on quantum mechanics were designed to make it clear that I was not ruling out the possibility of irreducibly statistical laws."[30] If Sellars is granting the possibility of statistical laws at the basis of physical science, then surely he is using the term 'causality' in this context (and possibly others) in a narrow way; so that statistical laws are not causal. When he thinks about a narrow use of 'cause', he writes:

> philosophers have often muddied the waters by extending the application of the terms 'cause' and 'causal'

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[27] Ibid., 89.

[28] Ibid., 87.

[29] Plato, Sophist 248C.

[30] Wilfrid Sellars, "Is Scientific Realism Tenable?" Proceedings of the Philosophy of Science Association 2 (1976), #27.

> in such wise that any law of nature (at least any nonstatistical law of nature) is a 'causal' law.[31]

However in some other contexts (as when characterizing Materialism) Sellars uses the term 'cause' in a wider sense, a sense which subsumes even statistical laws; as is clear in the following passage: "I understand the term 'causation' in terms of explanation, the variety of explanations we can give."[32] This wide sense of 'cause' seems to be equivalent to the one given to the term 'determinism' by Mario Bunge in Causality and Modern Science, which he defined to include two principles:

> 1. Genetic Principle: Nothing comes from nothing or goes to nothing.[33]
>
> 2. Principle of lawfulness: Nothing lawless occurs.[34]

Sellars' considered definition, then, is that a physical entity or event must be (i) spatial, (ii) temporal, and

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[31] Wilfrid Sellars, "Counterfactuals, Dispositions, and the Causal Modalities," in Minnesota Studies in the Philosophy of Science, eds. Herbert Feigl, Michael Scriven, and Grover Maxwell (Minneapolis: University of Minneapolis Press, 1958), #50.

[32] Wilfrid Sellars, "Discussion [of Sellars' 'Raw Materials, Subjects, and Substrata'] in The Concept of Matter in Greek and Medieval Philosophy, ed. Ernan McMullin, (Notre Dame: University of Notre Dame Press, 1963), 276.

[33] Mario Bunge, Causality and Modern Science, 3rd ed. (New York: Dover Publications, 1979), 24.

[34] Ibid., 22.

(iii) have causal properties (in a wide sense). And Sellars requires the physical$_1$-physical$_2$ distinction because he finds it impossible to identify or reduce sensa to currently available physical entities, events, or properties. Hence, sensa are physical$_1$, but not physical$_2$.

## B. SCIENTIFIC REALISM

Of the various labels, the one Sellars has most often identified himself with, and which others use to describe him, is Scientific Realist (Scientific Materialist would be just as appropriate). An examination of this concept will serve to highlight Sellars' position. And because Cornman has taken great effort to distinguish types of Scientific Realisms, it will be worth while to follow his distinctions.

Cornman points out that Sellars' Scientific Realism is based on the scientia mensura doctrine, which reads, "in the dimension of describing and explaining the world, science is the measure of all things, of what is, that it is, and of what is not that it is not."[35] But all this implies is some type of Naturalism. What we need to add to

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[35] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd. 1963), 173.

Naturalism is an Ontological Realism about pure theoretical entities and events of science to get Scientific Realism.

According to Cornman, we can distinguish three forms of Scientific Realisms, which he goes on to differentiate as: Minimal, Moderate, and Extreme. Minimal Scientific Realism holds that some pure theoretical terms of science are successful referring terms. This is to be contrasted with Scientific Instrumentalism which holds that all pure theoretical terms of science are merely instruments or calculating devices, which are in principle eliminable by such techniques as Ramsey or Craig transcriptions.[36] This is the position of Idealists, Direct Realists, and Phenomenalists. Sellars rejects all these and their instrumentalist strategies. The current debates between Bas van Fraassen's Constructive Empiricism and

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[36] Both transcriptions are meant to be ways of translating sentences which contain theoretical terms to sentences which do not. A Craig transcription applies to axiomatized (formalized) languages in which there is an effective procedure for making a distinction between two sets of non-logical terms. If these conditions hold, then Craig has shown that it is possible to substitute one set for the other; specifically to substitute observational terms for theoretical ones.

A Ramsey transcription assumes that we have a quantified set of statements containing theoretical and observational predicates. The transcription is accomplished by substituting for theoretical predicates (second-order) variables. This conjunction of statements is then quantified by prefixing to this compound statement an existential quantifier for each "theoretical" variable.

Sellars's Scientific Realism strikes me as a variation.[37] However, according to Ernest Nagel, the Realist-Instrumentalist debate is purely terminological.[38]

Moderate Scientific Realism holds that physical objects are comprehensively and successfully described and explained by pure theoretical terms. Extreme Scientific Realism extends this claim to include persons.

Having distinguished these three types of Scientific Realists, Cornman claims that Sellars falls within the rubric of at least a Moderate Scientific Realist, but not into that of an Extreme Scientific Realist because of his views on persons. To accommodate Sellars' seemingly hybrid view, Cornman introduces a new division into his classification; calling it Sellarsian Scientific Realism. For contrast, Cornman cites Quine as an example of an Extreme Scientific Realist--attributing to him the views that as concerns persons:

(1) Only human behavior needs explanation.

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[37] Bas van Fraassen, "Wilfrid Sellars on Scientific Realism," Dialogue 14 (1975): 606-616; and idem, Scientific Image (Oxford: The Clarendon Press, 1980). Cf. Wilfrid Sellars, "Is Scientific Realism Tenable?" Cf. also Gary Gutting, "Scientific Realism vs. Constructive Empiricism: A Dialogue," The Monist 65 (1982): 336-349.

[38] Ernest Nagel, The Structure of Science (Indiana: Hackett Publishing Company, 1979), 152; cf. Wilfrid Sellars, "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation," in Philosophical Perspectives.

(2) Such explanation is achieved by positing, at most, neuro-physiological states of brains.

By contrast, Cornman claims that Sellars believes that:

(1′) Human behavior and perceptual propositional attitudes need explanation.

(2′) Perceptual propositional attitudes are explained, in part, at the scientific level by postulating sensa which are not physical$_2$.

In his reply to Cornman, Sellars[39] corrects him by denying an implication of (1′), namely, that human behavior and perceptual propositional attitudes are on the same explanandum level. He points out that the existence of perceptual propositional attitudes and sensa, unlike human behavior, are theoretical notions introduced to explain particular types of human linguistic behavior; thus agreeing with Quine's (1) that only human behavior (including human linguistic behavior) needs explanation. He goes on to add that his position differs from Quine's in requiring the intermediary position of postulated perceptual propositional attitudes and sense impressions (which ultimately are recategorized as sensa) to explain human linguistic behavior. And, although at one stage of his explanation Sellars identifies both perceptual propositional attitudes and sense impressions with physical states of the brain, because of the ambiguous use of 'physical', he disagrees with Quine that these $\text{physical}_1$ states are $\text{physical}_2$; and ultimately he rejects the view that sense impressions (transposed to sensa) are even "states": they are rather species of "absolute processes" or "events".

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[39] Wilfrid Sellars, "Seeing, Sense Impressions, and Sensa: A Reply to Cornman," The Review of Metaphysics 24 (1970-1971): 391-447.

In light of this clarification, the proper classification of Sellars' realism would be a variety of Extreme Scientific Realism with a commentary added about the $\text{physical}_1$-$\text{physical}_2$ distinction.

## V. POLEMICAL ISSUES

The $\text{physical}_1$-$\text{physical}_2$ distinction introduces a difficulty concerning the status of Sellars' alleged Materialism. Cornman (like Smart) would define Materialism as the claim, roughly, that only $\text{physical}_2$ things exist.[40] And because of Sellars' espousal of irreducible

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[40] Cornman in early writings defended a version of nonreductive materialism: he held that groups of living physical objects acquire psychological properties and that non-living physical objects also acquired such properties as colors. But in his latest writings he adopts, what he calls, "the neutral identity theory" which he identifies with Spinoza's "double aspect theory." On this view it is some neutral entity that may have both physical and psychological properties.

$\text{physical}_1$ properties, Cornman concludes that Sellars is not a Materialist!

Sellars replies that the term Materialism is, as such broad philosophical terms tend to be, vague. There is, he adds, enough historical warrant to call a position which includes the claim that all entities are either $\text{physical}_1$ or $\text{physical}_2$--as Sellars claims there are--a Materialistic one.

In view of this exchange between Cornman and Sellars, it is clear that Sellars thinks of himself as a $\text{Materialist}_1$, but not as a $\text{Materialist}_2$--to correspond to the $\text{physical}_1$-$\text{physical}_2$ distinction.

Following the lead of Sellars, Emergent Materialism can be characterized as a Materialism which recognizes, in addition to the physical properties (of inanimate "matter") studied by physics, a hierarchy of "emergent" properties[41] to correspond to the sentient aspects of living organisms. Sellars' variety of Emergent Materialism, when applied to the study of human beings, can then be seen as requiring the emergence of physical entities, sensa, to correspond to human sense impressions ("raw feels"). In characterizing Materialism as early as 1952, Sellars was already conscious of the irreducibility of sense qualities:

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[41] Using current jargon, we could call them "supervenient properties."

> Materialism must be interpreted as the claim that mentalistic concepts can be defined in terms of physicalistic concepts together with concepts of sense qualities, neither of these latter two types being definable in terms of the other.[42]

The debate is between those who espouse a Reductive Materialism or an Eliminative Materialism and those who espouse, as Sellars calls it, Emergent, Holistic, Non-reductive Materialism, of which Sellars' Materialism$_1$ is a variety. The issue is whether some mental entities are reducible or eliminable, or neither.

Let me briefly consider three seemingly plausible arguments against Emergent Materialism. The first goes something like this: According to Materialism, only physical events exist, and all and only physical events are determined by laws of physics. A non-physical event would be either a nomological dangler or a nomological violator. So, unless sense impressions are identical with physical events, they are nomological danglers or nomological violators. And so, either not all events are physical or some physical events are not determined. And both alternatives are incompatible with Materialism. This seems to me to be the strongest objection to Sellars' position. His best response is to deny that something which is physical$_1$ is necessarily a nomological dangler or violator; and anticipate (hope?) that a new law or theory will make room for sensa.

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[42] Wilfrid Sellars, "Mind, Meaning, and Behavior," Philosophical Studies 3 (1952), 84, #1.2213.

A second related line of reasoning is that of Donald Davidson[43] who sees the mind-body relation as 'anomalous'. I am not sure I have understood his meaning. But let me explain how I interpret him. He classifies ontological views according to whether they accept of reject psychophysical identity and psychophysical laws. A psychophysical law is to be identified with a "correspondence rule" or "bridge law," or, as Davidson puts it: "a biconditional, '(x)(x is true-in-L if and only if x is P )' where 'P' is replaced by 'physical predicate' (a predicate of L)."[44] To deny this law, would mean holding that there is some x, a mental entity or event, which is true-in-L but is not P. To appreciate Davidson's problem, let us reformulate the biconditional as the conjunction of the following two conditionals:

(A) '(x)(if x is P then x is true-in-L)'

(B) '(x)(if x is true-in-L then x is P)'

(A) is true for Davidson. This is just a way of formulating the "supervenience" of the mental on the physical, which Davidson accepts. The culprit here is (B). Since Davidson accepts the identity theory, causal interaction, and supervenience of the mental on the physical, but denies the predictability of some mental events, the best way I have of making sense of his claim is to ascribe to him a belief in the Token-Token Identity Thesis and a rejection of the Type-Type Identity Thesis. This would amount to the belief that mental types may have a number of correlative physical tokens. And there will either be a definite or an indefinite number of tokens for each type. If it is a definite number, but more than one, then either the biconditional has to be made more complex, or conditional statements used. Suppose there are two physical states that correspond to a psychological state, then the biconditional must have the disjunctive form: '(x)(x is true-in-L if and only if either x is F or x is N)'; or the relation must be expressed with a series of conditionals as, for example:

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[43] Donald Davidson, "Mental Events," in Essays on Actions and Events (Oxford: Clarendon Press, 1980).

[44] Ibid., 214-15.

> (x)(if x is P then x is true-in-L) & (x)(if x is F then x is true-in-L) & - (x)(if x is true-in-L then x is P) & - (x)(if x is true-in-L then x is F)

If the number of tokens for each psychological type is indefinite, then the relation cannot be expressed in a definite biconditional. And perhaps it is this indefinite case that Davidson has in mind in rejecting the psychophysical law.

Let me just cite one problem for type-type identity theories. I have in mind Edwin Land's experiments in color vision.[45] It was a received opinion that the human eye could see colors only as a result of stimulation by a combination of the wavelengths of three colors (red, blue, and green), but Land has demonstrated that this is not the case. There are more ways to produce full spectrum color vision including using only a combination of white and monochrome light. This is a peculiarity of color vision because a color photograph will not register such a color spectrum. There is thus a many-one relation between wavelengths and the seeing of colors.

Given the above understanding of a psychophysical law, the following four positions are possible for Davidson:

| | Psychophysical Identity | Psychophysical Laws |
|---|---|---|
| Nomological Monism | Accept | Accept |
| Nomological Dualism | Reject | Accept |
| Anomalous Dualism | Reject | Reject |
| Anomalous Monism | Accept | Reject |

Davidson claims that Materialism is a type of Nomological Monism; while Parallelism, Interactionism, and Epiphenomenalism are types of Nomological Dualisms; Cartesianism is a type of Anomalous Dualism. Davidson identifies himself with Anomalous Monism.[46]

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[45] Edwin Land, "Experiments in Color Vision," Scientific American 5 (1959), 84; idem, "Retinex Theory of Color Vision," Scientific American 12 (1977), 108.

On the basis of the type/token distinction, token-token identity is accepted by all mind-body identity theorists--this is what makes them Monists. Apparently, for Davidson, the type-type identity would make the monism nomological; otherwise anomalous. And it seems that Davidson is identifying Materialism with a type-type identity thesis. However, I find this use of 'materialism' odd. At best Davidson should have distinguished between a Nomological Materialism and an Anomalous Materialism. Calling a position a Monism does not distinguish it from Materialism, Idealism, or Neutral Monism; and clearly Davidson is distinguishing Materialistic Monisms from Dualisms. By Davidson's classification, I would call Sellars an Anomalous Dualist, since he rejects the Psychophysical Identity thesis. This is to say that Sellars would reject the token-token identity thesis. His position is that mental phenomena are species of $\text{physical}_1$ phenomena, whereas the Identity Thesis wants them to be $\text{physical}_2$ phenomena.

The third problem for Materialism is this. Davidson, but not Sellars, is assuming that the Identity Thesis (in some form) is acceptable. But the Identity

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[46] Donaldson, "Mental Events," 213-214.

Thesis has been criticized for violating Leibniz's Law: (x)(y)[(x = y) iff (P)(Px iff Py)]. Suppose that x is a mental event and y is a physical event. If they are identical, then all properties of one are also properties of the other. Specifically, the identity thesis must satisfy three criteria: (1) identity of time, (2) identity of location, and (3) invariant correlative occurrence. Criterion (3) could be looked upon as a limiting case of mutual causality. It is pointed out by the critics of the identity thesis that it makes sense to locate physical properties in space, but they deny that it makes sense to locate mental properties in space on the ground that to do so is a category mistake. Therefore, the Identity Thesis is incoherent.

Although this criticism is ineffective against Sellars who rejects the Identity Thesis, a problem of location is introduced for Sellarsian Materialism$_1$ in the article "Sellarsian Materialism" by William Robinson. His charge is that the concept of a sensum, which is described by Sellars as being physical$_1$, has no criteria for being located in space (which is a necessary condition for being physical in any sense) and is, therefore, not even physical$_1$. If Robinson is right, then Sellars, despite his own wishes, cannot be a Materialist$_1$.

Robinson's charge makes sense only relative to his interpretation of Sellars' notion of "postulation" of sensa. On Robinson's reading, Sellars is claiming that secondary properties such as colors have 'successor predicates' in the Scientific Image. Shifting from the Manifest Image to the Scientific Image, the concept of the subject of these properties is changed first from a concept of a physical object to the concept of a person; then the concept of a person is replaced by a concept of a group of molecules; and finally this concept is replaced by a concept of a group of absolute processes. To mark these transitions of successor concepts of properties, Robinson uses a priming technique; such that we start with, e.g., red (object) and move to red'(sense impression), then to a red'' (group of molecules), and finally to red''' (sensa). Robinson apparently concedes that sense impressions can be located, but if the successor sensa are to be introduced as causes of these, then such a causal explanation does not of itself provide a criterion of location for sensa and is, in fact, compatible with sensa as being immaterial causes.[47]

The details of Robinson's argument do not have to be reviewed, since his argument rests on a misunderstanding of Sellars. Robinson cites the relevant passage in Sellars' Carus Lectures for a correct understanding of Sellars, but, unfortunately, misunderstands it.[48]

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[47] Ibid., 220.

[48] Ibid., 214.

The way to understand Sellars' position in introducing sensa is clearly understood by Jay Rosenberg in his "The Place of Color in the Scheme of Things: A Roadmap to Sellars' Carus Lectures."[49] What Robinson took to be a postulational theory about sensa, Rosenberg sees correctly to be an "interpretive" theory:

> For Sellars now proposes to distinguish sharply and explicitly between two kinds of explanatory theories. (III-36/47)[in the Carus Lectures] Let us call them "postulational" and "interpretive." The leading feature of a postulational explanatory theory is that it introduces new domains of entities. The leading feature of an interpretive explanatory theory, in contrast, is that it does not. An interpretive theory instead supplies a family of new forms of concepts by means of which what we may refer to in a category-neutral (transcendental) vocabulary as actual items or entities are re-represented in terms of new categorial structure.[50]

As will be made clear in the chapter on perception, Sellars wants to single out an invariant property (e.g., red) in perception from the variant subject. The invariant property is given over to interpretive theory; while the variant subject is given over to postulational theory.

Robinson's mistake was to conflate these distinctions under postulational theory. But once the distinctions are made, it is simply a mistake to view sensa as the causes of sense impressions, as does Robinson.

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[49] Jay Rosenberg, "The Place of Color in the Scheme of Things: A Roadmap to Sellars's Carus Lectures." The Monist 65 (1982): 315-335.

[50] Ibid., 327.

Sensa are sense impressions which have been recategorized as absolute processes. So, if Robinson finds no problem in giving sense impressions a location in space, then he should find no problem in giving sensa a location either!

Up to now, I have characterized Sellars' epistemology and ontology in general terms. To understand his position--as a philosophical position should be understood--it must be embedded in the context of concrete problems. The epistemological problem is to determine whether empirical knowledge has foundations in basic empirical beliefs. The ontological problem is the mind-body problem, which Sellars subdivides into the intentionality-body problem and the sensorium-body problem. These problems are viewed by Sellars from the perspective of a clash between two conceptual frameworks: the Manifest and the Scientific Images. I will, therefore, turn to a description and criticism of these two conceptual frameworks.

## CHAPTER 2

## THE MANIFEST AND THE SCIENTIFIC IMAGES

The aim of philosophy, Sellars tells us, "is to understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term."[1] This presupposes a relation of persons living in a world--a relation which Sellars expresses by the phrase 'man-in-the-world', and which philosophers try to describe, analyze, and explain.

What is this 'man-in-the-world'? Let me introduce the notion of an Alpha World to characterize the "common sense" world of any group of people, which includes various beliefs and modes of explanation. It includes beliefs in the hum-drum of the passing show and the beliefs in supernatural entities, and it includes mechanistic as well as teleological explanations.

Since Sellars' interest is in philosophical self--reflection, the Alpha World which he is interested in is his own--that means he is interested, at most, in the Alpha World of Western Civilization; instead of, let us say, the Alpha World of the Hopi Indians. Furthermore, Sellars shows no religious inclinations for a belief in supernatural entities, so his world is austerely limited to a core of restricted common sense. But Sellars also has faith in the power of science to get at the truth about the universe, and he specifically believes in the existence of postulated microentities. To carve out of the Alpha World those features which are to serve his particular interests---and these as reflected in the dialectical history of philosophy--Sellars introduces two regimented conceptual frameworks: the Manifest and the Scientific Images.

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[1] Wilfrid Sellars, "Philosophy and the Scientific Image of Man," in _Science, Perception, and Reality_ (London: Routledge and Kegan Paul, Ltd., 1963), 1.

He offers the Manifest Image as the regimented common sense conceptual framework from which we can begin to do philosophy, and he gives us three reasons for this. The first is that it is the core framework in which we live--the Lebenswelt. It is the framework in which "man came to be aware of himself as man-in-the-world."[2] Second, it is the framework in which man tries to understand the universe and his place in it by correlational science. Third, it is the common root framework of the Platonic--Aristotelian tradition in Western philosophy based on the concept of substance.

He also offers the Scientific Image as the framework of theoretical science which seems to compete with the Manifest Image for our allegiance. As Sellars presents it, it is intended to represent the asymptotic limit of theoretical scientific development, and for this reason, Sellars sometimes refers to it as the Peircean Image. The basic individuals of this developing image are the microentities of current microphysics, whereas the idealized basic individuals are non-Whiteheadian absolute processes.[3]

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[2] Ibid., 6.

The images are regimented according to the following assumptions. First, Sellars believes that there cannot be a conceptual framework without a language. So the origin of conceptual frameworks coincides with the origin of language. Second, Sellars believes that language is rooted to publicly observable features, so introspective and theoretical talk has a derivative status.

These assumptions lead to the idea that the basic categories of the Manifest Image must be publicly observable things in spatial, temporal, and causal configurations with each other. And the mode of explanation is restricted to correlational induction. The basic individuals of this Image form the 'great chain of being' stretching from persons and other animate objects to various inanimate physical things. But reflecting on the findings of anthropologists and historians which point to a widespread human belief in animism (anthropomorphism), Sellars posits the existence of an Original Image in which all things are conceived to be persons. The Manifest Image is, then, from this perspective a historical truncation and categorial refinement of the Original Image through de-personalization.[4] And it is clear that pride of place must be given to the concept of a person in the Manifest Image.

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[3] W. Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 59.

Calling them "non-Whiteheadian" is intended, I take it, to disavow any suggestion of mind-like "prehensions" (intentions) to absolute processes (i.e., Whitehead's "actual entities").

Sellars stipulates that the Manifest Image is to exclude all postulated entities. By contrast, the Scientific Image is by definition constituted by the introduction of postulated entities. The paradigms of posited entities are the microentities of contemporary science: the molecules and their atomic and subatomic constituents. The use of the term 'scientific' here may be misleading, suggesting that the Manifest Image does not include science. But this would be a wrong understanding. Perhaps the better way to look at the distinction between the Images is to think of both Images as species of a Super-Scientific Image. The Manifest Image is then that portion of the Super-Scientific Image which is restricted to the sort of science of correlational induction catalogued by J. S. Mill. And the Scientific Image is that portion which postulates new entities to account for the nomological anomalies of correlational induction. For example, the molecular theory of gas behavior is able to explain why gases follow statistical laws rather than deterministic ones.

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[4] W. Sellars, "Scientific Image of Man," 10; also idem, "Aristotelian Philosophies of Mind," in Philosophy for the Future, eds. Roy Wood Sellars, V.J. McGill, and Marvin Farber (New York: The Macmillan Company, 1949).

Scientific theory construction (in the postulated sense) develops from the Manifest Image model by analogical extensions. However both Images are based on a substance ontology. Their radical break occurs with the positing of absolute processes (events) rather than particles in the Scientific Image. Of course, as with the Manifest Image, Sellars prescribes the types of allowable scientific techniques in the workings of the Scientific Image; so that the posits of atoms by Leucippus and Democritus, for example, have little to commend them as a Scientific Image. Yet despite this, Sellars does believe that the positing of new entities for the purpose of explaining phenomena is a rudimentary groping for the Scientific Image.

To get a better understanding of the Images, it is worth while to examine how Alan Donagan misconstrued the Manifest Image, especially since Sellars took the effort to correct him. Donagan mistakenly identified the Manifest Image with an Alpha World, and naturally argued that there are many 'Manifest Images'--indeed as many as there are different beliefs about the makeup of the universe. With that presupposition, he went on to charge Sellars with a bad dichotomy: "This distinction between the Manifest and the Scientific Image of man seems to be drawn in the wrong place."[5] The reason he gave is this. Sellars stipulated that the Manifest Image is not to include the belief in posited entities; only the Scientific Image is to contain such beliefs. So the distinction between the Images seems to boil down to whether or not posited entities are included. But if the Manifest Image is equated with common sense (Alpha World) beliefs (as it is in Donagan's mind) than the exclusion of posited entities from the domain of common sense has counterexamples in the myriad religions which posit all types of supernatural beings. For this reason, in Donagan's estimate, the Manifest-Scientific Image distinction is badly drawn by Sellars.

To understand how Donagan was misled, we must remember that each philosopher is free to define words and phrases as he wishes. Sellars uses the phrase "Manifest Image" in a technical sense. Donagan however took it in a non-technical manner. So the misunderstanding turns out to be linguistic. The problem Sellars' position raises concerns the place of such conceptual frameworks as exemplified by mythologies and religions, and also, I may add, by various pseudo-scientific and philosophical Wel-

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[5] Alan Donagan, "Determinism and Freedom: Sellars and the Reconciliation Thesis," in Action, Knowledge and Reality, ed. Hector-Neri Castaneda (Indianapolis: The Bobbs-Merrill Co., 1975), 79.

tanschauungen. The answer is that the Manifest and the Scientific Images--by being idealizations--are very selective. One of the purposes for these Images is to serve verisimilitude; that is why calling them species of a Super-Scientific Image is apt. And for Sellars the Manifest Image is to include only that segment of common sense that philosophers in the Platonic tradition have found to be plausible. And the same demand is made of the Scientific Image: only those techniques and results which contemporary science finds fruitful and plausible are included in the developing Scientific Image. And this means that all other explanatory schemes and categorial frameworks are, by stipulation, excluded both from the Manifest and the Scientific Images. In short, the place of mythologies and religions, which gave Alan Donagan a problem of placement, is in neither of the Images.[6] There are all sorts of beliefs and quasi-scientific theories which have room neither in the Manifest nor in the Scientific Image.

What then is the purpose of introducing the technical terms Manifest Image and Scientific Image? The introduction of Images is in keeping with his philosophical method which, as he puts it, is to construct models by which to understand the many dimensions of experience. And because, as he thinks, models tend to be procrustean, the philosophical dialectic consists of improving models.

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[6] Wilfrid Sellars, "Reply to Alan Donagan," _Philosophical Studies_ 27 (1975), 181.

When Sellars introduced the Manifest-Scientific Image distinction he was thinking of Weberian ideal types as offering a logical reconstruction of common sense and science. Max Weber meant by an ideal type an idealization, a fictitious concept which nothing in the world instantiates without qualifications. The reason for introducing such a concept is to aid the understanding and to help in explaining. In science the use of ideal types is represented by the various laws of science. None of them is instantiated without various qualifications. For example, laws of motion are true only in a vacuum, where there is no friction, no extraneous forces, etc. But despite the fact that laws are idealizations, they are useful, they work--up to a degree. Sellars has a similar task in mind for the concepts of the Images. They are idealizations intended for explaining his own Lebenswelt, the dialectics of Western philosophy, and the progress of science. Sellars' use of the phrase 'Manifest Image' is a technical use of a metaphoric phrase. The word 'manifest' is used to suggest that the thing talked about is common, obvious, apparent, universally known; while the word 'Image', as Sellars explains, is purposefully used to suggest two meanings: first that an image is a copy of something, and not the original; and second that an image, if it is an accurate likeness, could be a true representation. So far there is nothing here to preclude us from identifying the Manifest Image with 'common sense', and it is a tempting identification to make. But it is a mistake which, as we will see, many of Sellars' critics have made; including Donagan and even Sellars himself at times.

However, when Sellars is self-conscious about the meaning of 'Manifest Image', he is careful to stipulate how he wishes it to be understood. Sellars is interested in two kinds of systematic beliefs: a segment of common sense which is literally common, but explicitly expressed in the Platonic-Aristotelian tradition; and the findings and procedures of hard-core correlational science. He is interested in defining and critically examining these ideal types.

## I. POLES TO THE HISTORY OF PHILOSOPHY

Sellars' concern is to distinguish one sense of 'common sense' which will serve in understand the history of philosophy. He thinks the philosophical dialectics can be understood as a conflict or tension between what, as a first approximation can, be called common sense and science. He says the Manifest-Scientific Image distinction gives poles to the history of Western philosophy. It does. But this characterization, however, strikes me as biased: the Manifest-Scientific Image distinction is a tension within a Naturalistic philosophy. This becomes clear once we substitute for the 'Manifest Image' the phrase 'correlational science', and for 'Scientific Image' the phrase 'theoretical science'. The tension Sellars is talking about is the tension between correlational and theoretical science. The broader perspectives, I believe, are given by viewing the history of Western philosophy as a tension between a Naturalism and Supernaturalism; or as a tension between Mechanistic and Teleological Explanations; or as a tension between fact and value, as does John Dewey in his Quest for Certainty.[7]

However, from a Sellarsian perspective, animistic and supernaturalistic beliefs, as well as teleological explanations can be understood as either retrogressions to the Original Image or as attempts to extend the use of the core category of a person either to the whole universe or a postulated part of it--as is done in such religions as Christianity, Judaism, and Islam. So conceived, one could, indeed, view the history of Western philosophy as a conflict between the common sense view and science. But thus seen, the role of science could be taken to be a skeptical challenge to the overextension of the common sense categorial scheme. And though I think there is something to be said for this view of the history of Western philosophy, Sellars would assign the role of critic to the categorial refinement of the Manifest Image itself, and not to the Scientific Image.

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[7] John Dewey, Quest for Certainty (New York: Capricorn Books, 1960).

The history of philosophy, according to Sellars, has for the most part been a preoccupation with the category of substance--both as descriptive of experiences and as prescriptive of posited entities. By stipulation, Sellars limits the Manifest Image to the use of the category of substance for descriptions of ordinary experience; and by this means he sidesteps the discussion of supernatural entities such as souls and gods. At most the positing of supernatural entities would fall into a pre-nascent Scientific Image; not into a Scientific Image because Sellars prescribes the sorts of explanations which fall into it, and which would exclude supernatural explanations. Teleological explanations of the sort envisioned by mythologies fall outside the scope of the Scientific Image. Therefore mythologies, because they rely on teleological explanations, fall neither into the Manifest nor the Scientific Image.

Sellars, however, sees the history of Western philosophy as a conflict between common sense and science.

But the precise sense in which this is true is not clear from a superficial reading of Sellars. When one thinks of common sense as applied globally to groups of people, one's first thought is of the Weltanschauung of a people, which--whatever else it may include-- minimally includes their beliefs concerning the 'furniture' of the universe and how this furniture is interconnected. This is how Donagan mistakenly interpreted the notion of the Manifest Image, taking the phrase as being synonymous with 'common sense' (understood as a Weltanschauung). But this interpretation of the Manifest Image is not what Sellars wants to differentiate in common sense. Sellars is not interested in mythologies or ideologies: he is interested in how philosophers have coped with giving a description and interpretation of their Weltanschauung. Sellars is interested in the systematic reconstructions of Weltanschauungen, i.e., with philosophies rooted in common sense. But if this were all there was to be said about Sellars' interests, then Homer's or Hesiod's poetry would qualify as a systematization of Greek mythology. But obviously this is not what Sellars is after. He is not thinking of a systematic mythology or a theology. The error of this line of thought is in thinking that common sense refers to some grouping of beliefs about the make up of the universe. He is not interested in systematizing beliefs. Rather, Sellars is trying to talk about those concepts and the principles which make any belief about the universe possible. To borrow a phrase from Collingwood, he is seeking the 'absolute presuppositions' of beliefs. Sellars assumes that there is an ideal set of absolute presuppositions (the Manifest Image) which is discovered or constructed (I am not sure which), and to which the categorizations of philosophers are approximations.

The core of common sense is that there are physical things and persons which have properties and which enter into relations. The Manifest Image is not only to contain the categorial scheme of substances, properties, and relations (among other things), but also the canons of induction as codified by John Stuart Mill.[8] The Manifest Image is itself a scientific image--a scientific image limited to a 'common sense' categorial scheme.

These Images, for Sellars, provide the ideal poles for an understanding the history of Western philosophy. On the one hand, we have the Manifest Image built around the category of substance; on the other hand, we have the Scientific Image built around the category of absolute process (event).

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[8] John Stuart Mill, A System of Logic, 4 books (1843): bk. 3. An abridged version is John Stuart Mill's Philosophy of Scientific Method, ed. and intro. Ernest Nagel (New York: Hafner, 1950). See the criticism of Mill's 'four methods' by Irving Copi, "Criticisms of Mill's Methods," in Introduction to Logic, 7th ed. (New York: Macmillan, 1986), 456-462.

## II. DEVELOPMENT OF THE IMAGES

Sellars attributes a history to both Images. The Manifest Image developed from an Original Image (in which all things are categorized as persons). He sees the refinement of the Manifest Image in the Platonic tradition; with Aristotle as the philosopher of the Image, and that Oxford-type philosophy as represented by Strawson is a contemporary embodiment of this Image. *Philosophia perennis* is construed to be the view endorsing the reality of the Manifest Image.

Both the Manifest and the Scientific Images are being groped for in an intertwined manner in the history of philosophy. There is no temporal (historical) demarcation between the Images. In fact, Sellars thinks of the Scientific Image as arising out of the demands of the refined Manifest Image. Neither the Manifest nor the Scientific Image is a historically finished product: both are the idealizations of two developments. The Manifest Image is the idealized systematizations of a *philosophical* 'common sense', while the Scientific Image is the idealized asymptotic limit of scientific ontological development. Present science is still working with a problematic particle-wave ontology. It has not as yet penetrated to an absolute process (event) ontology. It may be said that

Sellars is anticipating the development of microscience as tending towards an absolute process (event) ontology.

## A. CATEGORY OF PERSONS

The Manifest Image is ultimately built around the concept of a person. However, analyzing the concept of a person and specifically stating the relationship between a person and his or her body are difficult problems. Sellars thinks of the Manifest Image as itself having a history, and about which falsehoods can be believed. Being wrong in one's analysis of persons, according to Sellars, results in the Platonic and Cartesian dualism of substances, which any Materialism must avoid.

An excellent formulation of the complexities involved in understanding the concept of a person is given in Sellars' article "Aristotelian Philosophies of Mind."[9] As I understand Sellars, the concept of a person (and how it is in the main understood by Aristotle) is the concept of a being endowed with a highly complex system of functions: a cluster of habits, dispositions, capacities and abilities expressing themselves in social linguistic communication. To have a mind is to have these functions.

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[9] Wilfrid Sellars, "Aristotelian Philosophies of Mind," in Philosophy for the Future, ed. Roy Wood Sellars, V.J. McGill, and Marvin Farber (New York: The Macmillan Company, 1949): 544-70.

And the distinctive trait of these functions is their intentionality.

> I shall without further ado state my agreement with the classical thesis (represented, among others, by Descartes and Brentano) that the distinguishing feature of mental facts is _intentionality_ or _aboutness_.[10]

The word 'intentionality' is a technical philosophical term. It refers to the fact that psychological acts have two characteristics. The first characteristic is that psychological acts are transitive--they are always directed at some propositional state. For example, 'I believe that it will rain'; or 'I want an apple' (which would be paraphrased by Sellars to 'I want it to be the case that I have an apple'). The second characteristic is that the propositional states may not be true. Thus, for me to believe that it will rain, does not require that it rain. Or, for me to want an apple, doesn't require that I get an apple, or even that there are apples.

Intentionality, for Sellars, though explainable through a behavioristic model of language acquisition, is an unanalyzable feature of semantical language, whose role is to express functional classifications of linguistic tokens. And the language of intentions, though too explainable by behavioristic learning theory, is part of practical discourse which needs to be added to descriptive and explanatory discourse.

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[10] Wilfrid Sellars, "Mind, Meaning, and Behavior," _Philosophical Studies_ 3 (1952), 84, #1.21.

For Sellars a person would be any material embodiment of certain functions; of which the primary is the ability to have conceptual thoughts: "conceptual thinking (which is the distinctive trait of man)."[11] Although we primarily call human beings 'persons', this practice is not long standing, nor does it have to continue. Primitive men and civilized men have believed that there are non-human persons; as is testified by the animistic conceptions of primitive men, and the more sophisticated beliefs of Christians who think of souls and God as persons. Our past practices testify that our concept of persons need not be limited to humans, and our more future oriented cyberneticians see nothing wrong with calling an ideal robot a person. In view of Sellars' regular appeal to computers as models for persons, he would agree the following sentiment expressed by Paul Churchland:

> If machines do come to simulate all of our internal cognitive activities, to the last computational detail, to deny them the status of genuine persons would be nothing but a new form of racism.[12]

It seems that the concept of a person is closely connected with certain types of behavior and functioning. Sellars is so concerned to emphasize the importance of cognitive functional attributes of persons--to the extent that in "The Identity Approach to the Mind-Body Problem" he introduces the central nervous system as a 'core person'. A core person is understood as the primary subject, whereas the whole person is the derivative subject of conceptual functions.

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[11] Sellars, "Scientific Image of Man," 34.

[12] Paul Churchland, Matter and Consciousness (Cambridge: MIT Press, 1984), 120.

The ways we relate to persons presuppose that they have the ability at least to responding to praise, chastisement, advice, etc. In the primary sense we expect persons to be able to understand and to use a language. Once this presupposition is expressed, it is clear that, for Sellars, a human being lacking a language is at best a potential person. As Sellars put it, "the members of a linguistic community are _first_ language _learners_ and only potentially 'people'."[13] And all entities--human or not--which are capable of using or understanding a conceptual language like ours are persons.

Now if a person is characterized primarily by the ability to use language, the problem, of course, is to specify what a language is. In some senses the concept of a language is broader than that of a person. After all we sometimes attribute languages to animals, e.g., the language of bees or dolphins. Although we use the term 'language' to include the communication between animals, we are not ready also to call these animals persons. So if persons are to be distinguished from non-persons by the use of language, it must be a distinct type of language which demarcates us from animals. And of course the paradigm of this is the human language. But at the same time it is conceivable that a non-human could use a human language, and it is possible that a human cannot use a human language. I am thinking of a sophisticated robot for the former case, and a brain defective human for the latter. So I think that it is clear that the notion of a person is independent of the notion of a human being. Whether a non-human person would be admitted into our community of persons with all rights and privileges is a peripheral question. Whether someone is admitted into our community of persons depends on how similar that person is to us. "Thus, to recognize a featherless biped or dolphin or Martian as a person is to think of oneself and it as belonging to a community."[14]

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[13] Wilfrid Sellars, "Language as Thought and as Communication," _Philosophy and Phenomenological Research_ 29 (1968-1969), 512.

These considerations should disabuse us of identifying in any simple fashion both the Manifest Image with common sense and the Scientific Image with a scientific view. Yet these categories have been conflated by most of Sellars' critics--producing a fundamental misunderstanding. I have clarified the notions of the Manifest and the Scientific Image by showing that they are philosophical idealizations in some respects of common sense and science, that Sellars introduces them to give dialectical poles to the history of, at least, Western philosophy.

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[14] Sellars, "Scientific Image of Man," 39.

The notion of a Manifest Image is a hybrid product of trying to satisfy several demands. From his early period Sellars retains the idea that philosophy is normative. He wants to have a normative framework for the history of Western philosophy. And when Sellars introduced the Manifest-Scientific Image distinction in the "Scientific Image of Man", he was thinking of Weberian 'ideal types' as offering a logical reconstruction and a model of common sense and science as satisfying several constraints. These I have distinguished as the constraint of the primacy of a public language, the constraint of faithfulness to the categories of common sense, the constraint of giving poles to the history of Western philosophy, and finally the constraint of demarcating common sense from science at the natural joints for the sake of dialectically resolving their current incompatibility. His critics have, however, forgotten this--partly because of Sellars' own lapses in his usage, but more probably because they failed to note that the way the distinction was formulated had both important consequences and that it rested on dubious assumptions. The crucial assumption is the constraint of a conventional public language which demands a priority for publicly identifiable material substances and persons. I am conscious both of the detrimental consequences to philosophy in Sellars' way of introducing sensa through the detour of the Manifest Image and of the behavioristic underpinning of this Image; consequently, I am concerned to spell out the bad ancestry of this Image which is the assumption that only a conventional public language is possible, and the bad consequences of accepting it which is a convoluted theory of perception.

My major objection to the category of the Manifest Image is that it is procrustean in excluding the category of absolute processes (events) even as a dependent category. I believe we have a wider notion of common sense than captured by Sellars' Manifest Image which does include the category of absolute processes (events). I will explain how Sellars attempts to reduce events to substances, and why he fails.

## III. THE MANIFEST IMAGE IS NOT THE COMMON SENSE IMAGE

At the moment I want to characterize the Manifest Image and to dispel the assumption that the Manifest Image is to be identified with common sense.

I want to distinguish the problems of (1) the phenomenology or description of common sense (which in Edmund Husserl is said to be, at least in intent, presupposionless), (2) the regimentation of common sense (which works with presuppositions), (3) the explanation of features of phenomenological common sense, and (4) the explanation of features of regimented common sense.

The self-conscious pursuit of (1) is that of the Scottish school of common sense, exemplified by Thomas Reid; the work of G. E. Moore and G. Ryle (to a large extent); the later Ludwig Wittgenstein who explicitly said that philosophy should be limited to descriptions and leave out explanations; the work of J. L. Austin who called his work a 'linguistic phenomenology'; and Husserl whose technique of bracketing was intended to isolate the descriptive component.

Sellars is not a descriptive phenomenologist of common sense in this tradition; rather he is allied with the efforts of those in the second category who rectify common sense for some systematic ends and methodological presuppositions. When such methodological constraints play a role, the result is a regimentation program. This, I believe, is also the case with those whom P. F. Strawson in his Individuals calls "descriptive metaphysicians", despite his use of the word 'description'. Strawson, like Sellars, assumes the primacy of a public language. The constraint comes from the requirement of identification and re-identification of individuals in public communication.

The mark of these philosophers is that they choose within the domain of common sense some primary types of individuals to which other types are reduced. With Strawson and Sellars these primary types are material substances and persons. Strawson sees Aristotle and Kant as within this tradition, and Sellars seems to agree. By rejecting the existence of non-material substances and adopting the linguistic perspective on philosophical problems, Sellars and Strawson become Ontological Materialists. Sellars falls within this rectifying tradition for two reasons. First, his ontology of the Manifest Image is self-consciously within the Aristotelian substance tradition, recognizing the primacy of material substances, living organisms, and persons. By this token, it is not strictly a phenomenological description (despite Sellars statements to the contrary). My specific reason for saying this is that Sellars does not include absolute processes as basic entities in the Manifest Image (though perhaps, as is suggested in Strawson's Individuals,[15] absolute processes may have a dependent status as far as identification is concerned).[16] Second, his ontology of the Manifest Image is committed to a physicalistic regimentation program, which could also be called Nominalism, Semantic Materialism, or Reism.[17]

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[15] Peter Strawson, Individuals (New York: Doubleday, 1959).

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[16] Sellars' mistake here seems to be similar to the one Bertrand Russell attributed to Leibniz in his _A Critical Exposition of the Philosophy of Leibniz_, 2nd ed. (London: George Allen & Unwin, 1937). The mistake attributed to Leibniz was of trying to construct a philosophical system on the basis of a subject-predicate form of sentences. Russell's corrective was to introduce relational sentences as irreducibly basic as well. I should add that I am not concerned here with the question of whether Russell was correct or not. Criticisms of Russell's interpretation of Leibniz are raised by Benson Mates, "Leibniz on Possible Worlds," in _Logic, Methodology, and Philosophy of Science III_, ed. B. van Rootselaar and J. F. Staal (Amsterdam: North Holland Publishing Company, 1968), and Hide Ishiguro, "Leibniz's Theory of the Ideality of Relations," in _Leibniz: A Collection of Critical Essays_, ed. Harry G. Frankfurt (New York: Anchor Books, 1972): 191-213. Cf. W. Sellars, "Meditations Leibnitziennes," in _Philosophical Perspectives_.

[17] Reism, a term coined, it seems, by Tadeusz Kotarbinski (or possibly by Franz Brentano), who also used the name 'concretism', is the program of recognizing as basic only spatio-temporal entities as the referents of names. All such acceptable names are called by Kotarbinski 'genuine names'; all other unacceptable names are called 'onomatoids' or 'pseudo-names'. The reistic program is to paraphrase all statements containing pseudo-names to statements which contain only genuine names. This is indeed Sellars' program, and Sellars is, therefore, a reist.

See Tadeusz Kotarbinski, _Gnosiology: The Scientific Approach to the Theory of Knowledge_ (Oxford: Pergamon Press, 1966). See also Vito Sinisi, "Nominalism and Common Names," _Philosophical Review_ 71, no. 2 (April 1962): 230-235; idem, "Kotarbinski's Theory of Genuine Names," _Theoria_ 30, no. 2 (1964): 80-95; idem, "Kotarbinski's Theory of Pseudo-Names," _Theoria_ 31, no. 3 (1965): 218-241.

It is because Sellars' concept of the Manifest Image is rooted in the Aristotelian tradition and is committed to Semantical Materialism that it cannot be called a descriptive phenomenology.

Sellars' position seems to be that the Manifest Image, and perhaps the reistic program generally, is to be understood as a corollary of the assumption of the methodological and conceptual priority of a conventional language. I will deny the validity of such a corollary.

As to explanations, some, like Wittgenstein, believed that philosophy should be concerned with descriptions and leave explanations to the sciences. Sellars disagrees. Philosophers should be concerned with providing theoretical explanations in those areas of inquiry which are neglected by the sciences but which are necessary to epistemology and ontology, as he put it: "Philosophy may perhaps be the chaste muse of clarity, but it is also the mother of hypotheses."[18] This is specifically true about the psychology of the conceptual mental processes. I believe that Sellars is involved in a regimentation program; specifically, that he is providing explanations of regimented descriptions. He is doing (4) and not (3).

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[18] W. Sellars, Science and Metaphysics, 12, #29.

## A. CONFUSION ABOUT THE MANIFEST IMAGE

In keeping with his regimentation program, instead of talking about a common sense-science distinction, Sellars introduces a technical vocabulary of a Manifest Image and a Scientific Image. These are to be refined counterparts to common sense and a scientific view relativized to the history of philosophy. Curiously, however, most of Sellars' critics--at times including Sellars himself--flatly equate the Manifest Image with common sense. This is a mistake. There is a close affinity between common sense and the Manifest Image, but this affinity, as I have pointed out, is not one of identity.

The confusion, as I see it, arises in the following way. Most readers of Sellars' philosophy learn about a Manifest-Scientific Image distinction, and because apparently nothing significant hinges on what at first sight seems just a neologistic labeling of a familiar distinction, it is henceforth wrongly associated with a pre-systematic common sense/scientific distinction. That such an identification is widespread is obvious from reading some of Sellars' commentators.[19] Not all commentators, however, endorse the equation.[20] The latter are, of course, correct

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[19] The following passages are culled from the critics: "The classical Sellarsian formulation of the problem we are discussing is that of the relationship of the Manifest and Scientific Images. An alternative formulation of

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the problem is in terms of the relationship between ordinary knowledge and scientific knowledge." William Rottschaefer, "Ordinary Knowledge and Scientific Realism," in The Philosophy of Wilfrid Sellars: Queries and Extensions, ed. Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978), 136.

"Many of us who are interested in Sellars' work were first attracted to his discussion of the relationship between the manifest or commonsense image of the world and the scientific image of the world." Thomas Russman, "The Problem of the Two Images," in Queries and Extensions, 73.

". . . the manifest or common-sense description." James Cornman, "Sellarsian Scientific Realism Without Sensa," in The Queries and Extensions, 61.

"it would be wrong to follow Sellars in describing this image [manifest image] as corresponding to the world as we know it to be in ordinary experience." Donagan, "Determinism and Freedom," 79.

"Wilfrid Sellars thinks that the scientific image is the really real world (the noumenon) while the manifest or common-sense image is only appearance (the phenomenon)." Vincent G. Potter, S. J., Philosophy of Knowledge, 4th revised printing (New York: Fordham University Press, 1988), 19.

[20] "An easy mistake is to take the manifest image to be the image of common sense." Robert Ackermann, "Sellars and the Scientific Image," Nous 7 (1973), 141.

"Insofar as Sellars' Manifest Image is an attempt to capture the manner in which common sense conceptualizes and reasons about perceptual experience, this appears to be a serious shortcoming." Albert Casullo, "Adverbial Theories of Sensing and the Many-Property Problem," Philosophical Studies 44 (1983), 158.

"Sellars was misguided in his efforts to identify something as 'the manifest image'. For the manifest image is a function of common sense, and common sense is not a static body of beliefs and principles." Joseph Pitt, Pictures, Images and Conceptual Change (Dordrecht, Holland: D. Reidel, 1981), 140.

"For the manifest image is intended to represent a way of thinking common to all of us which has been one of the poles of philosophic reflection." Richard Bernstein, "Sellars' Vision of Man in the Universe," Review of Metaphysics 20 (1966), 117.

"The Manifest Image is an idealized construction ... I can see no warrant for accepting the particular characterization of the Manifest Image he offers." C. A. Hooker, "Sellars' Argument for the Inevitability of Secondary in repudiating the equation. Though there is a close relationship between a common sense conceptual framework and the Manifest Image; still, as I have argued, it is wrong to equate the two.

Let me pin-point the source of the conflation. Part of the explanation lies with Sellars' own carelessness in distinguishing the Manifest Image from the common sense framework. Since his earliest papers, he has been involved in analyzing a 'common sense' conception of the world as expressed in empirical languages. For example, before 1960 he tried to analyze the Aristotelian "common sense" view of the world in his "Aristotelian Philosophies of Mind." But when he tried to systematize such a view in "Philosophy and the Scientific Image of Man," where he introduced the phrase "Manifest Image", he self-consciously had departed from a descriptive phenomenology of the common sense world. He clearly stipulated that the Manifest Image was both an abstraction and an idealization of the common sense view.

But in some of his post-1960 writing he is careless with the common sense-Manifest Image distinction; as, for example, in these extracts: "the concepts in terms of which the objects of the common-sense or 'manifest' image are

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Qualities," Philosophical Studies 32 (1977), 346.

identified;"[21] or, "In the course of the argument I defend with reservations, the thesis that the world of 'ordinary experience' (the 'manifest' image) is, in the Kantian sense, phenomenal."[22]

It is this sliding between using 'common sense' and the 'Manifest Image' terminology in his post 1960 writings which partly accounts for the confusion of some of his critics. The real confusion however stems from the fact that the Manifest Image does in fact encompass a great deal of what we mean by common sense; after all, it was partly designed for this purpose.

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[21] Wilfrid Sellars, Science and Metaphysics: Variations on Kantian Themes (London: Routledge and Kegan Paul, Ltd., 1967), 150.

[22] Ibid., viii.

# CHAPTER 3

# ONTOLOGICAL COMMITMENT

For Sellars the task of ontology is to say what sorts of entities suffice for a complete description and explanation of the goings on in the universe relative to some linguistic framework, and ultimately relative to our present linguistic framework. This is so because descriptions and explanations are given in some language or other, and the task becomes one of determining which language suffices for the description and explanation of the panorama of the universe. Once this linguistic turn is taken, the attempt must be made to find a linguistic medium sufficient to express all one wants to.

Some have taken ordinary language as a guide to ontology, while others have tried to remedy, what they took to be, the faults of ordinary language. Sellars is somewhere in between when he introduces the notion of the Manifest Image (which as I have stressed is not identical to a Common Sense framework). But inasmuch as the Manifest Image is intended to capture the major features of common sense, Sellars is both a codifier and rectifier of ordinary language. He believes that for the pragmatic considerations of using ordinary language, one must be sensitive to the "forms of life" in which the language is used; but for ontological and semantical considerations a canonical language is to be sought. This dual consideration is evident is Sellars' debate with Strawson on the problem of presuppositions of definite descriptions.[1] Sellars distinguishes the dialectical (pragmatic) uses of language in which what Strawson has to say about truth-value gaps is correct, and the ontological and semantical uses, for which Russell's theory of descriptions is more appropriate. His final pronouncement is that the Manifest Image is pragmatically useful, but ontologically inadequate.

The problem of ontological commitment is relevant to the regimentation of the Manifest Image and, consequently, to the broader issue of how to combine the Manifest and the Scientific Images. More directly, a knowledge of the ontology of the Manifest Image is important in knowing which resources are available to us in constructing a theory of perception, and, specifically, in determining whether an adverbial theory of perception is appropriate at the Manifest level.

The problem of ontological commitment is linked with the notion of ontological reduction. And a key thesis of Sellars' ontology is that in the Manifest Image we are committed to the existence of physical objects, but not events; and this is so because talk of events is reducible to talk about physical objects. To understand why a reduction of events is needed in Sellars approach, we have to focus on what, I take it, is a universally agreed on assumption--at least by the followers of Bertrand Russell--that unless a qualification is made, or the context suggests the qualification, or language is used figuratively, a literal subject-predicate (including a relational) statement implies that the subject term refers to an object, or, put otherwise, makes an ontological commitment.

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[1] Wilfrid Sellars, "Presupposing," in Essays on Bertrand Russell, ed. E.D. Klemke (Urbana: University of Illinois Press, 1970): 173-89.

If we seriously take the criterion of ontological commitment (of a perspicuous or literal language) as revealed by the grammatical subject term, then the way to escape from an undesirable ontological commitment is to recast the form of the sentence in such a way that the problematic subject term is no longer the subject of the sentence. The recast version can then be called the 'logical form' of the original 'misleading form'. Sellars' major concern is to logically reconstruct sentences to perspicuously display their logical form.

The distinction between grammatical and logical form was introduced to escape from being committed to the existence of unwanted entities. This technique of recasting sentences into a logical form was, as far as I am aware, first programmatically used by William Ockham.[2] However the first self-consciously systematic use of this technique was by Jeremy Bentham, who called it "paraphrasis."[3] This was, I believe, the same technique used by Russell in his theory of descriptions.[4] And it was and is a standard technique used, I would guess, by most analytic philosophers. What goes by the name 'reduction', in one sense of that term, is just this tactic of paraphrase. The goal of eliminating reference to abstract entities by this technique was practiced also by G. E. Moore, G. Ryle, R. Carnap, T. Kotarbinski, and, more recently, by W. V. O. Quine, D. Davidson, R. M. Martin, and W. Sellars.

Since Sellars is in many areas a follower of Russell, he adopts this principle that the apparent minimal criterion of ontological commitment of a language resides in what is expressed by the grammatical subject of a sentence. "Anything that can be talked about is an object."[5] If the grammatical subject-predicate form is taken seriously as committing us to a referent of the subject term, then the unqualified logical outcome of this kind of thinking would be Meinong's ontology, which gives to every purported object of reference a mode of being or existence.

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[2] This is an interpretation of Ockham I find in Michael J. Loux's "The Ontology of William Ockham," in Ockham's Theory of Terms: Part 1 of the Summa Logicae, trans. and intro. Michael J. Loux (Notre Dame, Indiana: University of Notre Dame Press, 1974).

[3] Jeremy Bentham, "The Theory of Fictions," in Bentham's Theory of Fictions, ed. and intro. C. K. Ogden (Paterson, New Jersey: Littlefield, Adams & Co., 1959).

[4] Russell's theory of descriptions was considered by Frank Ramsey to be a paradigm of philosophical analysis.

Now whether Meinong's ontology entails a contradiction, as Russell contended, is disputable; but that it seems to offend our sense of reality, as Russell also contended, is more plausible. To avoid linguistic commitment to unwanted entities, the procedure is to use paraphrase (translation) so that the unwanted entity is no longer mentioned by the subject of the sentence; and yet the transformed sentence is equivalent in some sense[6] to the original one.

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[5] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 43.

[6] The equivalence is to be stronger than material equivalence. And the specification of this sense of equivalence must face Quine's objections to such construals as 'synonymous' or 'same in meaning' as expressed in his famous "Two Dogmas of Empiricism," in From a Logical Point of View, 2d ed., rev. (Harper Torchbooks, 1961). Quine's own proposal (shared by Wittgenstein and Sellars) is to accept a sense of equivalence construed as sameness of (linguistic) use: "The behavioral doctrine tells us that this relation of synonymy, or sameness of meaning, is sameness of use." W. V. Quine, "Use and Its Place in Meaning," in Theories and Things (Cambridge, Mass.: Harvard University Press, 1981), 47.

But Sellars is quick to recognize that ontological questions cannot be decided simply by paraphrase. After all paraphrase is a two-way street. For example, Sellars believes that in the thing-framework it is physical things which primarily exist, while in the event-framework it is events, i.e., events are reducible to things in the former framework, while things are reducible to events in the latter framework. Whether primacy is given to substances or events must be decided on grounds other than availability of paraphrases. So extra-semantical issues must be considered which guide paraphrase.

Let us generalize and call all efforts to find ontological primacy 'ontological regimentation.' And I will distinguish semantical regimentation from extra-semantical regimentation.

Paraphrase and the search for perspicuous languages loom large in Sellars' philosophical arsenal in revealing ontological commitment. And when talk turns to ontological commitment, one has to deal with Quine. Sellars disagrees with Quine about the criterion of ontological commitment relative to the use of quantifiers in symbolic logic. For him, unlike for Quine, variables do not have a referring role. Variables do not function as indexical expressions, they function as place holders for linguistic expressions. This substitutional approach to quantification theory, carrying no ontological commitment, allows him to quantify over names, predicates, relational predicates, and sentences as well. Ontological commitment for Sellars lies in names only.[7]

## I. SEMANTICAL REGIMENTATION

These semantical regimentation efforts take two forms, depending on the apparent entity being dealt with. These are the first-order and second-order reductions.

In the first method, which may be called first-order (or same level) reduction, the troublesome statement is substituted with an equivalent statement in which the troublesome term no longer appears. Sometimes this is described as providing a contextual definition. Russell's theory of descriptions, for example, is in terms of contextual definitions.

To illustrate how paraphrase is used to formulate ontological commitment to physical objects and persons, Sellars offers as examples three types of first-order reductions.[8] The first example is this. "The average man is 5′10" can be paraphrased as "The average number of the heights of n men is the sum of the heights divided by n." The commitment here is to numbers rather than to the average man, and unless numbers are to be included as basic entities, they too must be further reduced. The second example given is: "The elephant . . ." is reducible to "all elephants . . ." The third example is this. Sentences containing the mention of conjunctive individuals as in "Jack and Jill and Tommy are a family" are reducible to "Jack is married to Jill. Jack is a man. Jill gave birth to Tommy." In the second method, which may be called second-order reduction, it is claimed that a semantical statement (i.e., a meta-statement about an object language) is masquerading as a first order object statement. It was Carnap's contribution to make much of this second technique, which is called by Quine 'semantic ascent'. Sellars uses this technique primarily in service for his reistic (Materialistic) nominalism. Judging by his practice, his endeavor is to show that there need be no logically reconstructed (regimented) sentences such that their subjects refer to abstract entities; that all such sentences can be translated into sentences having subjects which refer to concrete entities. From this perspective, the problem of universals (specifically the realist-nominalist controversy) can be viewed as the question whether all apparent referents to abstract entities are paraphraseable to referents about linguistic entities. The realists say no; the nominalists keep trying.

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[7] Wilfrid Sellars, "The Language of Theories," in _Science, Perception, and Reality_ (London: Routledge and Kegan Paul, Ltd., 1963), 116, #27.

[8] Wilfrid Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in _Action, Knowledge, and Reality: Essays in Honor of Wilfrid_, ed. Hector-Neri Castañeda, (Indianapolis: The Bobbs-Merrill Company, Inc., 1975), 299-300.

Sellars uses paraphrase and semantical ascent as means to disengage us from a belief in abstract entities in general, and events in particular. The resulting ontology of the Manifest Image is reistic and nominalistic.

## II. EXTRA-SEMANTICAL REGIMENTATION

There seem to be three extra-semantical standards used by Sellars for ontological commitment.

The first extra-semantical consideration with which Sellars expresses sympathy is found in Strawson's Individuals.[9] In Strawson's hands, the question of primacy takes the form of the question: Which entities are independently identifiable? The working assumption in Strawson's work is that whatever is identifiable is also publicly learned. There is a remarkable coincidence between Strawson and Aristotle on which entities have pride of place. Such entities are said to be substances, and are found to be physical objects and persons. Pride of place to questions of ontology in the Manifest Image for Sellars must be given to the Aristotelian-Strawsonian search for primary beings.

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[9] Peter Strawson, Individuals (New York: Doubleday, 1959).

Although Sellars uses this criterion, he also introduces another criterion for demarcating the Manifest Image. The Manifest Image is to play the role of one pole as a heuristic device for understanding the history of philosophy. By this criterion, the regimentation of common sense must reflect the practice of, to use Strawson's phrase, 'descriptive metaphysics'.

But when it comes to a criticism of the Manifest Image and its replacement by the Scientific one, Sellars adds the criterion of the best explanation. Evidently, in the Manifest Image those entities which are descriptive of our world, and by which we locate ourselves in the world, are also used to explain the goings on of our world on the Manifest Image level. However, once the Scientific Image is introduced, this coincidence drops out. The criterion of what exists becomes whatever it is necessary to posit in giving the best possible explanation of phenomena. And for Sellars this is to be determined by theoretical science.

# CHAPTER 4

# PROBLEM OF COMPATIBILITY OF THE IMAGES

The global problem of materialism for Sellars is to combine, if possible, the Manifest and the Scientific Images-of-Man-in-the-World. He argues, however, that these Images are incompatible, and are, therefore, impossible to combine. What then is the problem of the compatibility of the Images? Why does Sellars believe the Images to be incompatible?

The problem can be formulated in a narrow and a broad way. The Images are broadly incompatible in two ways. First, they are incompatible in their views about basic entities. The Manifest Image is based on a belief in publicly observable substances: physical objects and persons; while the Scientific Image is based ultimately on a belief in posited absolute processes. Second, they are incompatible in their views about the properties of their respective basic entities. The Manifest Image includes the view of Direct Realism, which holds that physical objects have such continuous (homogeneous) secondary propertied as colors. For example, a common sense table has a continuous brown surface; while the table as described in microphysics is a gappy, colorless swarm of molecules. Which table is real? A thing cannot have incompatible properties simultaneously: the table cannot be simultaneously colored and colorless; continuous and gappy.

The narrow incompatibility of the Images concerns also their respective views about persons. In the Manifest Image persons are characterized by the possession of intentionality and sensations; while in the Scientific Image everything consists of posited colorless processes which do not possess intentionality or sensations.

Given these incompatibilities, the reasonable alternatives are to: (A) accept the distinction between the Images or (B) reject the distinction. If one opts for (A), then one can either (A-i) agree with Sellars that the Images are incompatible, or (A-ii) agree with someone like James Cornman who argues that they are compatible.

Assuming (A-i), several alternative present themselves to Sellars. (a) Merge some parts and eliminate or reduce other parts of one Image to the other; (b) eliminate or reduce completely one Image to the other; (c) merge some parts and eliminate or reduce other parts of the two Images to a third Image; or (d) eliminate or reduce both Images to a third.

Sellars considered choice is a version of (A-i-a): to combine some portions, eliminate other portions, and reduce still other portions of the Manifest Image into the Scientific Image. To do this Sellars distinguishes different types of discourse: practical, descriptive, explanatory, and semantical. Practical and semantical talk in the Manifest Image is to be merged with the Scientific Image--it is irreducible; some descriptive talk in the Manifest Image is to be eliminated, and some of it is to be recategorized; while teleological explanations in the Manifest Image are to be reduced to causal explanations.

A major critic, James Cornman, disagrees with Sellars and accepts (A-ii). Indeed he refers to his ontology as the '"neutral version" of compatible common-sense realism'.[1] He defends his conclusion on the basis of accepting Direct Realism and rejecting all forms of Indirect Realism, of which Sellars' Critical Realism is a species.

Another approach which should be taken seriously is that of C. D. Hooker[2] who also adopts position (A-ii) but for reasons different from Cornman's. He objects to Sellars' characterizing such secondary qualities as colors being "simple (unanalyzable)" and "homogeneous". He accuses Sellars of the fallacy of moving from "I don't see x as F" to "x is not F". Substitute for "x" some color name, let's say "red"; and for "F" "complex" or "heterogeneous," and this, for Hooker, becomes Sellars' argument for the simplicity and homogeneity of red: "I don't see red as heterogeneous; therefore, red is not heterogeneous." Hooker's own position is to remain agnostic here, but he pointing out that on his interpretation, contrary to Sellars, Materialism$_2$ remains a possibility.

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[1] James Cornman, Perception, Common Sense, and Science (New Haven: Yale University Press, 1975), 392. Cornman's position on sensing is dialectically complex (convoluted?). However, my suspicion is that his final position has affinity to Davidson's 'anomalous monism' and may even be compatible with Sellars' thesis of the equivalence of sensa and sensing theories (see below chapter 9 on perception).

[2] C.A. Hooker, "Sellars' Argument for the Inevitability of Secondary Qualities," Philosophical Studies 32 (1977): 335-348.

My position is (B). I reject the common assumption of both Sellars, Cornman, and Hooker that the Manifest Image is identical to common sense. With this rejection I sidestep a common problem that Sellars and Cornman have about the status of sense impressions in the Manifest Image. I am not satisfied by either Cornman's or Sellars' position because of their mutual rejection of sense data (sensa, sense impressions) as phenomenal individuals. Here I am in agreement with some of Frank Jackson's arguments for the existence of sense data as presented in his book Perception.[3]

The recognition of sense data as phenomenal individuals in common sense, however, does not eliminate the problem of compatibility between my rendition of a common sense and Sellar' Scientific Image. What I will accomplish, if I succeed in defending the sense data theory, by distinguishing common sense from the Manifest Image, is an ontological simplification. I will also bypass complications in the theory of perception, and I will in addition provide foundations for empirical knowledge. Ultimately, however, I agree with Sellars about the need to give a distinct ontological status to sense impressions in the Scientific Image.

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[3] Frank Jackson, Perception (London: Cambridge University Press, 1977).

As to the Sellars-Cornman controversy, insofar as they are arguing about the same issues with the same presuppositions, I believe that Sellars has the more convincing arguments for Critical Realism. But if Critical Realism is correct (as I believe it is), then there is a problem of compatibility of Images.

It is clear to me that the Manifest Image is not a phenomenological description of our ordinary experience. And if it is not, the main consequence of what I take to be a departure from ordinary experience is a faulty description and analysis of perception. My specific claim is that we have a sensuous perception of absolute processes (events) which we can also recognize to be such. This Sellars denies. The result of this denial is a convoluted theory of perception involving several conceptual transpositions of the descriptions of sensorial contents, which, however, ultimately concludes with the recognition of absolute processes, albeit within a different conceptual framework, the Scientific Image. My main objection to

Sellars' position is not that he is wrong in his conclusion, but that he is wrong in taking his peculiar detour to this conclusion. The underlying constraint on his position is the necessity to adhere to what it is possible to think and know within a public language. But even with that constraint an alternative approach is possible--an approach which I will defend in the chapter on perception.

## I. THE MIND-BODY PROBLEM

If there is a distinction between being a person and being a human being, then the necessary condition of being a person is in having and exercising linguistic functions. And although the possession of some kind of body or other is also necessary, no specific type of body seems essential. We may also speculate that for a language to exist which is about the world, observational capacities are also necessary. But whether these observational capacities are exercised through sensorial intermediaries or can be exercised through direct responses to brain states does not seem to be essential.[4] Again the use of language presupposes some kinds of intentions or purposes to be realized, but again no specific ones seem to be essential.

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[4] Richard Rorty, Philosophy and the Mirror of Nature (Princeton: Princeton University Press, 1979), ch. 2 (discussion of his 'antipodeans'). See also the objections of Eddy Zemach, "The Possibility of a Materialistic Language," Ratio 25 (1983); and Kenneth Gallagher, "Rorty's Antipodeans: An Impossible Illustration?" Philosophy and

In dealing with the place of persons in a Materialistic scheme of things, it is clear then that we must give a Materialistic account of language. But human persons have the additional trait of having 'raw feels' (a term used by Sellars to refer to our sentience). And because human being do have raw feels, we must find a place for these in a Materialistic scheme. What has traditionally been called the mind-body (or the mind-brain) problem divides, for Sellars, into two sub-problems. The first (the intentionality-body problem) is to describe and explain intentionality, or equivalently describe and explain the workings of conceptual functions in a language. The existence of thoughts is part of the problem of finding a place for representations in general. The second sub-problem Sellars calls the sensorium-body problem. The problem is to describe and explain the role of raw feels (sensations) in a Materialistic framework. It is a problem because sensations seem to require a distinct categorial status, and this seems to be incompatible with the monistic requirement of Materialism.

The existence of purposes (intentions) and normative behavior generally require an ontological location.

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Phenomenological Research 45 (1985): 449-455.

However, Sellars treats purposes as an aspect of intentionality, so that the mind-body problem remains divides for him into the two sub-problems: the intentionality-body and the sensorium-body problem.

From a linguistic perspective, human beings engage in different types of discourse, and the philosophical endeavor is characterized by Sellars as the attempt to understand how various types of discourses mesh with each other. Initially we can discern three types of discourse: normative, descriptive, and explanatory.

(a) The striking fact about human beings is that they are engaged in various activities, guided by norms of what ought to be (rules of criticism) and what ought to be done (rules of action). And normative discourse plays an essential role in Sellars' philosophy; for, after all, descriptions and explanations are given relative to norms of correctness, suitability, justification, and such. And though normative discourse is the glue that holds all types of talk together, Sellars does not see any problem of transferring the normative discourse of the Manifest Image to the Scientific Image. Normative discourse needs simply to be joined to the descriptive and explanatory scheme of an ideal science: "Thus the conceptual framework of persons is not something that needs to be reconciled with the scientific image, but rather something to be joined to it."[5] This position is consistent with what in an early essay, "Mind, Meaning, and Behavior," he called Scientific Behaviorism: the "thesis of the causal reducibility of mental events to bodily events, where causal reducibility does not preclude logical [ir]reducibility."[6] Normative language, though logically irreducible, is causally reducible in an ideal science. This is simply the affirmation of the irreducibility of 'ought' to 'is'.

(b) As to thoughts, Sellars thinks that these can be identified with neuro-physiological processes in the brain, and thus do not pose a serious problem. His proposal (theory) is that the intentionality of thoughts is to be understood by analogy to the intentionality of a conventional language. And intentionality as such can be understood as a unique irreducible semantical metalanguage. But, argues Sellars, the (analytic) irreducibility of types of discourse is compatible with a causal explanation of all discourse with the resources of a sophisticated behavioristic learning theory.

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[5] Wilfrid Sellars, "Philosophy and the Scientific Image of Man," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 40.

[6] Wilfrid Sellars, "Mind, Meaning, and Behavior," Philosophical Studies 3 (1952), #3.3322. I have added the "ir" to the text on the assumption that its omission must be a typographical error.

(c) As to the sensorium-body problem, which for succinctness we can state as the problem of locating the place of (Locke's) secondary qualities in the scheme of things,[7] Sellars transposes the categorial place of secondary qualities as properties of physical objects in the Manifest Image to theoretically posited sensa in the Scientific Image. And sensa, he argues, cannot be eliminated, reduced to, or identified with presently known physical properties or events of the brain. He, therefore, grants them a distinct ontological standing. By contrast, the Manifest Image mistakenly locates secondary qualities in the physical world. And because of this the Manifest Image cannot be reconciled with the Scientific Image; it must be replaced by the Scientific Image. For this reason, the descriptive and explanatory language of the Manifest Image cannot be joined to that of the Scientific one.

I am not directly concerned with (a), so I will assume that Sellars' position is tenable. (b) can be divided into two sub-theses. I have no quarrel with the first sub-thesis that thoughts are to be identified in some way with brain states. However, the other major sub-thesis, namely that a public conventional language is epistemologically primary and is a necessary condition for conceptual thoughts, is offered by Sellars as necessarily true. He defends this position by arguing that any alternative is impossible. Any other alternative turns out to be a variation of, what Sellars calls, the myth of the given. My criticism of this is that his claims about thoughts tend to conflate claims about conceptual thoughts with claims about non-conceptual thoughts. This difference between conceptual and non-conceptual thoughts is clearly distinguished by Sellars only in his recent writings. But the implication of the distinction are not worked out by Sellars. So I don't know what his considered views are about this distinction. Whatever may be Sellars' considered views on this, I argue that an innate, pre-conventional, representational system is possible, and in virtue of this possibility, a version of the given is a possibility as well. That is to say that the non-conceptual representational system can provide foundations to empirical knowledge. It suffices to refute Sellars' position if it can be shown that some version of the epistemologically given is not impossible, as I will do.

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[7] This is expressed even more succinctly by the title of Jay Rosenberg's essay "The Place of Color in the Scheme of Things: A Roadmap to Sellars' Carus Lectures," The Monist 65 (1982).

As to (c), I agree with Sellars' conclusion, but not with his reasoning for this conclusion. My disagreement concerns the constraints that are imposed on the concept of a Manifest Image. These are derived mainly from his denial of the given, and his insistence on behavioral foundations. This requires him to adopt an ontology based on what is possible on the supposition of the primacy of a public language. It turns out that this is an ontology of substances as envisioned by Aristotle and Strawson in his 'descriptive metaphysics'. My objection to the Manifest Image is that it is not the conceptual framework of common sense. Specifically it does not have room for an ontology of absolute processes, while common sense does. The consequence of this denial of absolute processes in common sense is that Sellars is compelled by the logic of the situation to introduce an adverbial theory of sense impressions in the Manifest Image. By contrast, since I accept a version of the given and recognize absolute processes in common sense, I leave myself in a position to defend something like the classical view of sensa. However, in his recent article "Sensa or Sensings" Sellars tries to reconcile the sense datum and the adverbial theories of sensations.[8] But this move, it seems to me, requires the recognition of absolute processes in common sense--if not in the Manifest Image.

Let me explain this. By using the phrase 'Manifest Image', I believe Sellars is trying to get at something like the core of common sense. However, I am troubled by his philosophical way of characterizing common sense. I ask myself: What about the common sense of the Hopi Indians? For all I know, Whorf's characterization of their language as based on categories of events and processes is correct. Now isn't the Hopi common sense different from the English or American notion of common sense? To this question, I can only guess Sellars' answer. If Strawson's Individuals or Kant's Critique of Pure Reason (as interpreted by Strawson in his Bounds of Sense)[9] can be used as guides here, then the answer would be that a language built solely on the categories of pure processes is impossible. The necessary conditions for a language are the requirements of the identification and reidentification of objects which are relatively stable; other wise the universe would appear to be too chaotic. Perhaps so. But a mixed language of substances as primary entities and pure processes as secondary entities having a conceptually dependent status on the concepts of material objects and persons is possible. Sellars himself raised this possibility: "we begin to wonder about the relative merits of 'substance' ontologies and 'process' ontologies (to say nothing of 'mixed' ontologies)."[10] Unfortunately, he does not examine the mixed ontology alternative, concentrating on the merits of either a pure substance or a pure process ontology instead. I believe that our common sense conceptual framework contains the sort of mixed ontology which Sellars ignores. And in fact we can construct a very simple argument based on Sellarsian principles to show that these principles imply a commitment to a mixed ontology in the Manifest Image. The argument is this. Consider the following inconsistent triad:

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[8] Wilfrid Sellars, "Sensa or Sensings: Reflections on the Ontology of Perception," Philosophical Studies 41 (1982).

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[9] Peter Strawson, Bounds of Sense (London: Methuen, 1966).

[10] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 49, #56.

(1)

All theoretical terms in the Scientific Image are introduced by models from the Manifest Image.

(2)

The Manifest Image does not include a concept of absolute processes.

(3)

The Scientific Image is grounded in the theoretical positing of absolute processes.

(1) is a principle of theory construction for Sellars. (2) and (3) are definitive of these Images.

Sellars, however, neglects to discuss explicitly how it is possible to introduce the concept of pure processes in the Scientific Image given principle (1). His explicit discussion in his Carus Lectures on the introduction of sensa as pure processes in the Scientific Image uses as models sentence types containing dummy subjects, such as, for example, the sentence 'It is raining'. But the conceptual framework from which these subjectless or dummy subject sentences are obtained is never mentioned. And since by stipulation this conceptual framework cannot be the Manifest Image, I conclude that it must be a different framework--the Common Sense conceptual framework. Given this alternative resource, (1) must be substituted with:

> (1′) All theoretical terms in the Scientific Image are introduced by models from the Manifest Image or the Common Sense Image.

My solution, then, to the inconsistent triad is to deny (1), specifically I distinguish a Common Sense Image from the Manifest Image, and hold that the Common Sense Image recognizes the existence of absolute processes which also act as models for the theoretical posits of the Scientific Image.

## II. REDUCTION OF EVENTS TO SUBSTANCES

I am interested in evaluating Sellars′ contention that the Manifest Image is committed to only persons, animate creatures, physical things, and events (understood as fleeting physical things) in space and time. He excludes from the Manifest Image not only events (as absolute processes) but also underived introspection of such mental processes as sensations and thoughts. These latter claims are implied by his claim that sensations and thoughts are best viewed as theoretical states. He believes that despite the fact that we can learn to respond directly to such theoretical states in introspection; still, they have a derivative methodological standing. At the present I will deal with the exclusion of absolute processes (events); these other exclusions will be taken up later.

If the existence of absolute processes is recognized in common sense, then the architecture of the Manifest Image, as I see it, collapses. This consequence is seen by Thomas Vinci in his critical article on Sellars' adverbial theory of sensing. He writes in a concluding remark that "One effect of abandoning the reducibility doctrine is to abandon the 'Aristotelian' construal of the common-sense framework."[11] By the 'reducibility doctrine' he means construing sensings as states of affairs rather than, as he puts it, 'event-particulars'. The whole point of the Manifest Image was to claim that what we directly perceive are physical objects and persons in public space. But if it is acknowledged that we also perceive pure processes, then the Manifest Image has lost one relevant function. It may still be an adequate pole for the history of Western philosophy, but it loses any claim of expressing our common sense view of the world.

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[11] Thomas Vinci, "Sellars and the Adverbial Theory of Sensation," Canadian Journal of Philosophy 11 (1981), 217.

The relevance of the ontological status of absolute processes in the Manifest Image is important for the following reason. If these absolute processes (like a flash of light) have a basic status, then a subclass of absolute processes may be categorized as sensa, or serve as a model (by analogy) for the postulation of sensa. Otherwise Sellars' 'no event' ontology of the Manifest Image compels him to either dismiss sensa as not given phenomenologically, or introduce them as postulated entities on the basis of another model. If, however, sensa qua events of common sense are introspectively available, Sellars' theory of perception and ontology can be short--circuited.

I want to defend the irreducibility of the category of absolute processes (events) in common sense, and to explore the reasoning used by Sellars to defend a physicalistic ontology which attempts to reduce talk of events, as a manier de parler, to talk of substances. Sellars is a radical nominalist sharing with R. Carnap and T. Kotarbinski a desire (on the Manifest Image level) for physicalism (reism).

## A. REGIMENTATION OF EVENTS

My main objection to the Manifest Image is that it excludes events (absolute processes). Of course, the exclusion of events is justified if, as Sellars claims to be doing, he is reconstructing the history of the Platonic tradition. This tradition is built around the category of substance, and does not have a place for independent events. Events, in this tradition, are always to be construed as aspects or histories of substances. In the substance-as-basic-entity tradition, according to Sellars, talk of events is reducible to a subject predicate form of expressions in which events are not mentioned. Events are given the status of facons de parler, that is, paraphraseable modes of speech: a thesis explicitly argued for in Sellars' "Time and the World Order."

> Now in the thing framework it is things which primarily exist, and in the 'event' framework it is 'events' which primarily exist. The contrast, in each case, is between the items which are named (by both proper and common names) and the items which are either contextually introduced (e.g., events in the thing framework, and 'things' in the 'event' framework) or are at bottom linguistic entities (thus qualities, relations, facts).[12]

and,

> If this is interpreted as a question concerning the structure of 'ordinary' temporal discourse, it seems to me perfectly clear that the basic individuals of

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[12] Wilfrid Sellars, "Time and the World Order: A Metaphysical and Epistemological," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl and Grover Maxwell (Minneapolis: University of Minnesota Press, 1962), 594.

> this universe of discourse are things and persons--in short the 'substances' of classical philosophy.[13]

There is some wavering on Sellars part on exactly how to provide the translation. On the one hand, he wrote: "Indeed, it is clear that ordinary discourse event-talk is in some sense derivative from substance-talk."[14] On the other hand, he concedes that "I failed to appreciate the kinship of event-expressions with abstract singular terms."[15] Specifically, "We have already construed events as a special kind of proposition."[16] But this wavering is unimportant for my purposes because I will claim that one type of event talk defies paraphrase.

So the question must be raised whether Sellars has succeeded in providing an analysis of events in terms of things. Eddy Zemach thinks he has:

> . . . it has been shown by several philosophers (most clearly, probably, by Wilfrid Sellars, in "Time and the World Order" that the ontology and the language of events can be defined by using the language of things only . . .[17]

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[13] Ibid., 594.

[14] Wilfrid Sellars, "Metaphysics and the Concept of a Person," in The Logical Way of Doing Things, edited by Karl Lambert, (New Haven: Yale University Press, 1969), 227.

[15] Ibid., 230.

[16] Ibid., 233.

[17] Eddy Zemach, "Four Ontologies," Journal of Philosophy 67 (1970), 235-236.

I believe that Zemach is wrong about this for the following reason. When speaking of events there is an ambiguity. In one sense an event is whatever happens to something in the course of time, or the relation of that thing to other things in the course of time. These kinds of events Sellars recognizes and analyzes correctly as states and relations between substances. On the other hand there are the 'quasi-physical objects' (Sellars' phrase) such as flashes of lightning, thunder claps, C#-ings, buzzings, etc.

In publications prior to the Carus lectures, Sellars recognized as basic only physical objects, animate creatures, and persons. But he hedged about the status of 'quasi-physical objects', as is hinted in this passage:

> What is an event? 'Event' is a category expression, and to ask the question is to ask for the place of 'event' in a system of categories. Leaving aside such puzzling occurrences as claps of thunder and flashes of lightning . . .[18]

I will call these puzzling events (as does Sellars in his later writings) 'absolute processes'. To mark the distinction, let us refer to the former (reducible) use of event as 'event-1' and to the latter, substantive sense of event (absolute process) as 'event-2'.

When we examine the cases of 'events' for which Sellars does succeed in providing a reduction, they turn out to be the following sort of cases. Sometimes the word 'event' is used synonymously with the word 'fact'. For example, 'the event of Caesar crossing the Rubicon' is equivalent to 'the fact that Caesar crossed the Rubicon'. And such talk is metalinguistic talk about the truth of propositions. Thus, 'the fact that Caesar crossed the Rubicon' is equivalent to 'it is true that Caesar crossed the Rubicon'. And if we incorporate Sellars' dot-quotational procedure, this is to be translated as: ·Caesar crossed the Rubicon· is true.[19]

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[18] Wilfrid Sellars, "Actions and Events," Nous 7 (1973), 195.

On another occasion, he gives an almost identical analysis. He says that 'the event of Brutus killing Caesar took place' is paraphraseable as 'that Brutus killed Caesar was true.' His next step is to claim that 'that clauses' are disguised ordinary language quoting devices; so the next (second-order) paraphrase becomes "'Brutus killed Caesar' was true."[20]

We may call all these examples propositional events, and what Sellars has to say about them seems to be true. But there is another type of event talk which is not so easily disposed off; this is the talk of occurrences like flashes of lightning and noises, which in his writings prior to the Carus Lectures Sellars referred to as 'quasi--

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[19] See below the chapter on behaviorism for a detailed explanation of dot-quotation.

[20] Ibid., 197.

physical' objects. In "The Structure of Knowledge"[21] he calls such events 'basic entities', but never explains why they are not full-fledged physical objects, and otherwise ignores their ontological status.

## B. SUBSTANCES AND ABSOLUTE PROCESSES

The locus classicus for the discussion of the difference between substances and absolute processes is, as Sellars recognizes, chapter VII, especially the section beginning with the "Independent Discussion of the Notion of Substance," of C. D. Broad's Examination of McTaggart's Philosophy[22] Broad uses various synonymous expressions for these. Substances are referred to as Continuants and Things, while Processes are referred to as Occurrents and Events.

To bring out the categorial distinctions between substances and processes, Broad employs the technique of considering which predicates are appropriately used with which linguistic expressions: "There are certain predicate-phrases . . . which it seems appropriate to conjoin with certain kinds of substantive names and phrases, and quite inappropriate to conjoin with certain others."[23]

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[21] Wilfrid Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, edited by Hector-Neri Castaneda, (Indianapolis: The Bobbs-Merrill Company, Inc., 1975).

[22] C. D. Broad, Examination of McTaggart's Philosophy, vol. 1 (London: Cambridge University Press, 1933), 128-170.

By using this method, Broad notes that "There is then, prima facie, a distinction between two sorts of substantive, which we will call "Processes" and "Things" respectively."[24]

> In Indo-European languages, at any rate, there are at least two kinds of substantive-name, viz., thing-names and process-names. There are several different kinds of adjective-phrase which can be conjoined with thing-names to give intelligible sentences. If any of these be joined with process-names the result is nonsense. Similarly, there are several kinds of adjective-phrase which can be conjoined with process-names to give intelligible sentences. If any of these be joined with thing-names the result is nonsense. This linguistic fact may suggest that there are two fundamentally different, though no doubt closely interconnected, kinds of particulars.[25]

He illustrates this distinction by noting that "It is sensible to say: 'There is a noise going on' or 'There is a movement taking place'. It would be nonsensical to say: 'There is a chair going on in my study.'"[26] Again, in the use of temporal predicates, "we talk of Things as 'enduring' or 'persisting through' a period of time. We talk of Processes as 'going on for' longer or shorter periods of time."[27] He adds:

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[23] Ibid., 142.

[24] Ibid., 142.

[25] Ibid., 150

[26] Ibid., 142.

> There are certain kinds of adjectives which may be called 'dispositional adjectives'. Obvious examples are words like 'poisonous', 'fusible', 'massive', etc. These are properly conjoined with thing-names and not with process-names.[28]

By using this same technique, Broad points out that Processes are not Facts:

> We can say of a certain process that it is loud and "buzzy"; we can say of a certain other process that it is soft and "tinkly"; and we can say of the two that they go on simultaneously. But surely it would be nonsense to talk of a loud or a soft or a "buzzy" or a "tinkly" fact, or to speak of two facts as "going on simultaneously".[29]

## III. ABSOLUTE PROCESSES IN THE CARUS LECTURES

For Sellars, prior to the Carus Lectures, the difference between full-fledged physical objects and some quasi-physical objects, such as thunder claps and flashes of light, seems to rest on the fact that these quasi--physical objects are fleeting particulars or are in some sense 'incomplete' in the sense of manifesting properties which are 'proper' rather than 'common sensibles' (in the Aristotelian terminology). It is only in his Carus Lectures that Sellars acknowledge these quasi-physical objects to be irreducible processes.

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[27] Ibid., 146.

[28] Ibid., 142.

[29] Ibid., 143.

My impression is that Sellars would say that though there is event-2 talk in common sense, it is taken by common sense to describe fleeting particulars (substances). Yet these are puzzling occurrences because it is unclear what would be the logical subjects of these events. He considers such locutions as 'it flashes' and the 'flash flashed'. But these locutions lead nowhere. All he manages to do is draw attention to an awkwardness in our subject-predicate talk. The bottom line for Sellars, despite this awkwardness, is that in the Manifest Image talk of events-2 is talk about ephemeral, fleeting substances. The plain truth is that the categorial status of events in common sense is obscure in the writings of Sellars prior to the Carus Lectures. And it is these kinds of events which find no place in the Manifest Image despite the fact that Sellars 'verbally' includes them. They cannot be included because they are not reducible to things. Sellars seems to concede their irreducible status only years later in the Carus Lectures. But if there is no room for events-2 in the Manifest Image, then it may be one of the shortcomings of that Image; and a good reason within

Sellarsian philosophy to abandon the Manifest Image for the Scientific one.

More troublesome cases arise once we distinguish between objective and subjective cases of, let's say, a flash of light. The objective case of a flash of light is publicly observable; the subjective case is not. What are we to say about a subjective flash of light? If we want to continue using the substance-attribute mode of analysis, how are we to construe such fleeting substances? The core of the classical understanding of substances attributed to them causal interaction. Do fleeting subjective flashes of light have a causal role? If they do not, then they perhaps should be viewed as epiphenomena. And indeed this is an interpretation of such processes taken into account by Sellars, particularly in his "Phenomenalism,"[30] and identified with Hobbes' phantasms. Despite his recognition of this Hobbesian element in common sense, Sellars ignores it in the Manifest Image. Here the primary substances are the publicly observable macro-substances such as pink ice cubes and red apples. And his problem is to find a suitable ontology that will do justice to both veridical and unveridical perceptions of public macro-substances. He does not try to reconcile the place of fleeting subjective events-2 in the scheme of things. He mentions them peripherally and in a promissory fashions to talk about them at some future (unspecified) time.

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[30] Wilfrid Sellars, "Phenomenalism," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963).

In the Carus Lectures, Sellars goes back to the examples of lightning flashes, thunder claps, C#-ing, and buzzings as models for making a case for pure processes in the Scientific Image. But if these models exist in the Manifest Image, then surely they can be used as models for a segment of the Manifest Image itself. Specifically, these models can be used to provide the category needed for sensa. The obvious objection to the introduction of such a category at the common sense level is that it serves no good purpose at that level. It may be said that the common sense framework is oriented towards practical ends and such a category is pragmatically useless.

But such an objection is beside the point. The question should be asked whether there are events-2 recognized by common sense which have no apparent substances as constituents. Sellars in the Carus Lectures points to a whole series of such events which when we try to transcribe them into a more perspicuous grammatical form come out as: 'It <verb>s over there'. For example, to describe the fact that there is thunder over there, we may say 'It is thundering over there' or 'It thunders over there'. Sellars distinguishes an objective and a subjective sense of such locutions. If used in the objective sense, I could be wrong about claiming that it is thundering over there; but if used in the subjective sense, then I can not be wrong (in any simple sense of wrong), i.e., I am expressing how I am being affected--in the manner as if I were hearing thunder over there. Sellars himself distinguishes between actual cases of hearing (and actual perceptions generally) from ostensive cases of hearing (and ostensive perceptions generally).

An ontologically interesting question is: what does 'it' refer to, or, better, how does 'it' function in such sentences as 'it thunders over there'? Are we not saying that the thunder thunders over there, or that lightning flashes over there, or that the flash flashed over there? If we pursue this line of thought, and this way of expressing ourselves, we find that all phenomenalistic uses of appear talk can be recouched in the '<nominalized verb> <verb>' rubric. For example, 'It looks red' can be transcribed as 'The redding reds'. And this linguistic practice can be codified. When the form 'It is <verb>ing' is used, it refers to a quantum of space and time. The word 'thunder' is the nominalization of the verbal noun 'thundering'; 'flash' of 'flashing'; 'sound' of 'sounding'; 'smell' of 'smelling', etc. A 'redding' is just the occurrence of a red patch (as the phenomenalists used to put it) over a time period. The problem with sense-data talk as, for example, a red patch, was to view it as an attribute of something, an attribute of a sensum or a person or some neutral entity. And the ontological commitment seemed to be to a substance. The shift here is not to regard the redding as the redding of something or other, but to say that the redding is a primitive entity.[31]

In the Carus Lectures, Sellars partially concedes these points.. He recognizes the use of such words as 'it' as being transcendental (in the scholastic sense). He recognizes the primitive use, or ur-use of, for example, 'red.' Yet, trying to maintain an ontology of substances in the Manifest Image, he insists on cashing in the demonstrative use of 'it' in (Lewis') expressive judgments by saying that 'it' refers to spatio-temporal stuff. Sometimes he thinks of it as Aristotelian 'matter'.[32] By making the primitive concept of, for example, red refer to stuff, he is trying to save the idea that the Manifest Image is built around the category of substance.

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[31] It seems to me that Sellars' early essays "Concepts as Involving Laws and Inconceivable Without Them," Philosophy of Science 15 (1948): 289-315, "The Logic of Complex Particulars," Mind 58 (1949): 306-38, and "Particulars," Philosophy and Phenomenological Research 13 (1952): 184-199, are precisely such an attempt to convert predicate expressions to sort or kind expressions; so that "This is red" is transformed into "This is a red (kind)." This thesis is developed in the essay by Robert G. Turnbull, "Things, Natures, and Properties," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Company, Inc., 1975).

[32] Wilfrid Sellars, "The Adverbial Theory of the Objects of Sensation," Metaphilosophy 6 (1975), 149.

But there may appears to be a major discrepancy between taking this line and Sellars denial of the given in knowledge. If expressive judgments (phenomenal reports) have a ground categorial structure of being reports about a primitive 'stuff', then Sellars is actually claiming that our observational knowledge does have a grounding. To overcome this criticism, it must be remembered that Sellars never meant to deny that observational knowledge is grounded, but only to deny the claim that such rock bottom knowledge is unalterable. It is the unalterability of our substantive categorial frameworks that Sellars calls the myth of the given.

My criticism comes to this. Sellars admits, on the one hand, that we can make judgments such as 'It appears to be red' where the 'it' is used as an indefinite demonstrative; yet, on the other hand, he also insists that 'it' in such judgments refers to stuff. Sellars is conflating these two uses of the demonstrative saying that 'it' need not refer to anything in particular, but in actuality it refers (in the Manifest Image) to stuff. My guess is that he would insist on the 'stuff' analysis as the actual rock bottom way we have of observing things (in the Manifest Image), and that the indefinite demonstrative use is an abstraction. This is implied in the following passage:

> On my account, however, there is no such determinate category prior to the concept of red as a physical stuff, as a matter for individuated physical things.

> *We*, as phenomenologists, can bracket the concept of an expanse of red in that radical way which involves an abstraction from all those implications involved in its being the concept of something *physical*. But by so abstracting we do not acquire a concept of red which belongs to a more basic *determinate* category---we simply abstract from such determinate categorial status it has, and construe it merely as a *particular* having *some determinate categorial status or other*.[33]

He would probably say that the 'it', used indeterminately, has become a variable, and since variables do not have a referring role (his objection to the objectual use of quantifiers), the only referring role the 'it' can have is by being substituted with a name (his substitutional analysis of quantifiers), and the only primitive category which will do for the substitution is that of *stuff*.

But why should he insist on this? His reasoning is that all concepts are learned, and learning is to be explained by a behavioristic theory based on the observation of public phenomena. And the primary public phenomena are relatively stable substances, i.e., stuff.

Sellars is ready to substitute 'process' for 'stuff' in the Scientific Image, but won't do this in the Manifest Image. Why? Evidently he won't in order to preserve the procrustean nature of the Manifest Image as built on the category of substance. But then I wonder what

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[33] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," *The Monist* (1981), 20, #84.

Sellars would say about Hopi expressive judgments. Would he say that they are grounded on the category of processes? Perhaps he would. But he would also probably add that the Hopi conceptual framework is not the framework of the Manifest Image. And I would answer that the framework of the Manifest Image is not that of common sense.

## IV. WHAT'S THE FUSS?

If events-2 (absolute processes) are recognized by common sense, but neither by the Manifest Image nor the Platonic tradition (which the Manifest Image intends to capture), then the only reasonable conclusion to draw is that the Manifest Image and the Platonic tradition are inadequate frameworks. And this is precisely the thesis I am defending. But the acute Sellars student may reply: "Yes, exactly. Sellars himself believes that the Manifest Image is inadequate and proposes the Scientific Image--built around an event ontology--as a substitute. So what's the fuss?"

The fuss comes to this. Sellars implies that talk about claps of thunder, flashes of lighting, C#-ings, and such, is a problem for the Manifest Image, but never expands the Manifest Image into, let us call it, a

'Manifest Image 2'--a mixed ontology based on both substances and events-2.

My criticism of the Manifest-Scientific Image distinction can therefore be put simply. Sellars says that the Manifest Image is built around the category of substance, and that it has no room for events as basic entities. There is, of course, talk of events in the Manifest Image, but such talk, according to Sellars, is reducible to substance talk. The ontology of the Manifest Image need not recognize a distinct category of events.

But on reflection, what Sellars is saying is either misleading or false. It is misleading by suggesting that 'common sense' (broadly conceived) has no room for events as basic entities. We would be misled in believing this if we conflate the Manifest Image with common sense. However, if we remember that the Manifest Image is a prescribed construct, then Sellars is free to stipulate what is and what is not basic in the Image. If he wishes to pursue a program in which substance are the only basic entities (and other apparent entities are claimed to be _facons de parler_) and call this framework the Manifest Image, he is free to do so. It is a different question when we ask whether the Manifest Image corresponds to our pre-systematic notion of common sense in relevant respects. My notion of common sense, in the relevant respects, contains as a basic category that of events-2 which is irreducible to the category of substances. If my contention about absolute events (events-2) is true, much of what Sellars has to say about sensations will become short-circuited. By not recognizing events-2 as basic entities in common sense, Sellars is almost compelled to introduce a baroque theory of sensations--called 'the adverbial theory'. He writes that the category of events has to be insightfully posited after strenuous work with the categories of substance. In one sense this is true--in the sense that one fully appreciates the role of events-2 in ontology after working through, for example, the mind-body problems. But after going through the Sellarsian philosophical tour de force, one feels as if one were tricked into a dishonest game of chess by not being given a Queen and discovering that Queens exist only after managing to get a pawn to the opposite end of the file. Sellars, on this analogy, is playing counterfeit chess by refusing to recognize the basic status of events-2 in common sense. My correction of Sellars is to introduce events-2 as basic entities of common sense by contrast to his introduction of events-2 as posited entities in the Scientific Image.

As I see it, the epistemological problem of foundationalism rests on whether to recognize the category of absolute processes (events-2) in common sense perception. If pure processes are given this recognition, then the existence of sensa can be recognized as a species of pure processes. The sensing of sensa, in turn, can provide foundations to empirical knowledge. Because Sellars does not give this recognition, he does not give them a role as objects of epistemically basic knowledge, and he is driven to make a detour to their recognition in the Scientific Image. My objection to the Sellarsian strategy is simply that he does not have to make the detour; the road to sensa is open at the common sense level. To make my case I will outline the details of Sellars detour and point out why it need not be taken.

# CHAPTER 5

# LANGUAGE AND THOUGHT

The problem of how thought and language are related is one of the major problems in contemporary philosophy, and it is particularly troublesome for Materialism which is committed to the denial of dualism. The main reason for the difficulty is that we do not have a clear command of the concepts of thought and language. Consequently, different claims about their relation are possible--depending on how "thought" and "language" are understood. In this chapter I propose to discuss their relation based on Sellars' latest writings.

## I. DESIDERATA

Any proposed theory of the relation of thought to language must be able to meet the following conditions of adequacy.

(1) Give an explanation for the pre-linguistic intelligent behavior of children. That children behave intelligently is commonly taken for granted. This is exemplified by various behaviors: the ability to discriminate and classify objects, the strategies and 'insights' used by

children to achieve given ends. The use of tools is an obvious example. Even such seeming obvious actions as avoiding bumping into things, not tripping over things, reaching to get something, not falling from heights, must be explained. A specific recommendation would be that any proposed theory should come to grips with the findings and speculations of such child psychologists as Jean Piaget and Lev Vygotsky.[1]

(2) Give an explanation for the claims of the deaf and blind, or the deaf and mute that they had thoughts prior to learning a language; e.g., the case of Helen Keller and I. Ballard.[2] Also take into account the data available about children growing up in isolation from language, such as the case of Victor, the "wild boy of Aveyron," who was found in Southern France in 1799; the Indian girls Kamala and Amala, who were found in Midnapur, India, in 1920; Kaspar Hauser, who was found near Hanover in 1823; and the girl Genie, who was found in 1970.[3]

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[1] See Jean Piaget, Psychology and Epistemology: Towards a Theory of Knowledge, trans. Arnold Rosin (New York: Viking Press, 1971); Lev S. Vygotsky, Thought and Language, trans. Eugenia Hanfmann and Gertrude Vakar (Cambridge, Mass.: M.I.T. Press, 1962).

[2] Case reported by William James, Principles of Psychology, vol. 1 (Henry Holt and Co., 1890; New York: Dover, 1950), 266. Case was commented on by Ludwig Wittgenstein, Philosophical Investigations, trans. G. E. M. Anscombe (New York: Macmillan Company, 1953), I.342.

[3] John Eccles, The Human Mystery (London: Routledge & Kegan Paul, 1984), 138.

(3) Give an explanation for the seemingly intelligent behavior of animals as reported by such ethologists as Konrad Lorenz.[4] Animals manage to move about avoiding obstacles and dangerous situations. They stalk and kill effectively. Sometimes they use tools for certain ends. And some of these tool discoveries seem to be passed from generation to generation. For example, the learned behavior of Japanese macaques of Koshima Island to wash sand from sweet potatoes and grains of wheat before eating them. Explain the communication between animals: e.g., the dance of the bees, chimps and gorillas using a sign "language,"[5] dolphin communication.[6]

(4) Account for the possibility of humans learning a language. How is it that humans are able to learn a conventional language such as English, while no other animals can--not even the chimps and gorillas (Washoe, Koko). What resources are needed to learn a language?

(5) Account for the existence of a distinction in our language between thoughts and language. We do make a

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[4] See especially Konrad Lorenz, Behind the Mirror (New York: Harcourt Brace Jovanovich, 1973).

[5] F. Patterson, "Conversations with a Gorilla," National Geographic (October 1978); Herbert Terrace, "Can an Ape Create a Sentence," Science (November 23, 1979); idem, Nim (Knopf, 1979); Thomas and Donna Sebeok, ed., Speaking of Apes (Plenum, 1980).

[6] John C. Lilly, The Mind of the Dolphin (New York: Avon, 1967).

distinction between these and describe them as if they were independent. And how do we account for such phenomena as our ability to perceive much more than we have words to express. For example, we can distinguish between various hues of colors for which we have no names. Then there is the phenomenon of not being able to express what we are thinking, or not finding the adequate words which express our thoughts. How is this possible?

(6) Distinguish, if possible, a human use of language from an ideal computer's. Can an ideal computer be said to be intelligent? What criteria must be satisfied? Is the Turing test adequate?[7] Some claim that the existence of Gödel's incompleteness theorem makes it theoretically impossible for a computer to think.[8]

(7) Relate the theory of thought and language to the findings of brain research. For example, is the theory

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[7] The Turing test is a criterion proposed by Alan Turing for determining whether a computer is as 'intelligent' as a human being. It consists of isolating both a person and a computer to be tested from the person doing the testing. All communication is to be done through a keyboard. The computer will have passed the test if the tester cannot distinguish the computer from the person being tested through this mode of communication. Mortimer Adler, an Aristotelian and a Thomist, in his The Difference of Man and the Difference it Makes (New York: World Publishing Company, 1971), apparently accepts this criterion.

[8] This was argued by J.R. Lucas in his paper "Minds, Machines and Gödel," Philosophy (1961): 112-127. The paper provoked a slew of polemical responses, including that of Douglas Hofstadter in his Gödel, Escher, Bach: An Eternal Golden Braid (New York: Basic Books, 1979).

consistent with our knowledge of various forms of brain dysfunctions, such as, aphasia, agnosia, etc.?[9]

I am not proposing to consider all these--that would be a staggering undertaking. I am only suggesting that any adequate theory of thought and language must do justice to these questions and explain the phenomena. What I will try to do is at least not write in such a way as if I were totally unaware of these areas of research, and I certainly don't want to claim anything that goes counter to what is well established by science.

## II. THOUGHT AND CONVENTIONAL LANGUAGE

Philosophers are divided on whether thought can exist prior to the acquisition of a conventional language. As a first approximation, it appears that behaviorists favor the total dependence of thought on language. I have in mind Watson, Ryle, Wittgenstein, Malcolm, Skinner, Rorty, Quine, and Rosenberg. The "mentalists" or "cognitivists" appear to favor the partial independence of thought from language. I have in mind Descartes, Locke, Kant, Husserl, Russell, Moore, Lewis, Piaget, Hall, Marras, Chisholm, Castañeda, Chomsky, and Fodor.

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[9] Howard Gardner, The Shattered Mind (New York: Alfred A. Knopf, 1974).

On first impression, I would place Sellars with the behaviorists and ascribe to him the view that thought is dependent on language. And looking over the critical literature on Sellars, this view is sometimes ascribed to him.[10] In general, the shared claim of Sellars' critics

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[10] The very title of the article by B. C. Thurston, "On Sellars' Linguistic Account of Awareness," Synthese 66 (1986), expresses this claim. Thurston claims that "Sellars offers an elaborate theory to the effect that all awareness is linguistic" (384).

Roderick Chisholm (in his correspondence with Sellars, "Intentionality and the Mental (Sellars-Chisholm Correspondence)," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, vol. 2 (Minneapolis: University of Minnesota Press, 1958), defended the position that the intentionality of language can be explained only by positing independently existing thoughts (as if Sellars denied this).

Hector-Neri Castaneda (in his correspondence with Sellars) argued that Sellars could not do justice to introspective knowledge without presupposing non-linguistic thoughts.

Ausonio Marras, in several papers: "On Sellars' Linguistic Theory of Conceptual Activity," Canadian Journal of Philosophy 2 (1973); "Reply to Sellars," Canadian Journal of Philosophy 2 (1973); "Sellars on Thought and Language," Nous 7 (1973); "Sellars' Behaviorism: A Reply to Fred Wilson," Philosophical Studies 30 (1976); "Rules, Meaning and Behavior: Reflections on Sellars' Philosophy of Language," in The Philosophy of Wilfrid Sellars: Queries and Extensions, ed. by Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978), argued that Sellars' account of thoughts was flawed by either an infinite regress or circularity. His alternative was to posit the existence of non-linguistic thoughts prior to language, concluding in one of these papers, "we have probably moved irremediably away from Sellars in countenancing pre-linguistic, symbolic or conceptual abilities." Marras, "Rules," 183.

Romane Clark argued in several papers: "Sensuous Judgments," Nous 7 (1973); "The Sensuous Content of Perception," in Action, Knowledge and Reality, ed. H.N. Castaneda (Indianapolis: The Bobbs-Merrill Co., 1975); "Sensibility and Understanding: The Given of Wilfrid Sellars," The Monist 65 (1982), that the range of our thoughts extends beyond our linguistic resources to express. Inspired by is that language genetically presupposes, at least, some kind of sign understanding. These critics would all probably agree with the following observation made by Nelson Goodman:

> The linguist may be forgiven for a vocational myopia that blinds him to all symbol systems other than languages. Anyone else recognizes that gestures, nods of approval and disapproval, pointings, facial expressions, bodily demonstrations, sketches, diagrams, models, play an important role in the acquisition and inculcation of skills of all sorts; and that mastery of symbols of many of these kinds occurs before, and aids enormously, in the acquisition of language.[11]

The implication of this kind of criticism, if it is directed towards Sellars, is to attribute to him the belief that the necessary condition of having awareness, thoughts, and symbolic or conceptual abilities is the possession of a

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the philosophy of Everett Hall, he follows up his criticism of Sellars with a theory of "sensuous judgments" constituting a language of thought and perception.

Thomas Russman writes: "Sellars denies that there can be pre-conceptual awareness of anything," in "The Problem of the Two Images," in _The Philosophy of Wilfrid Sellars: Queries and Extensions_, edited by Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978), 92). He repeats this charge in his _A Prospectus for the Triumph of Realism_ (Macon, GA: Mercer University Press, 1987): "Sellars assumes throughout this attack [on the given] that there is no such thing as non-conceptual (or preconceptual) perceptual awareness.(8)"

Robert Ackermann comes up with the following conclusion: "It would then seem that the Jones myth underlying the internalization of speech as giving rise to thought would not be compatible with the scientific image," in "Sellars and the Scientific Image," _Nous_ 7 (1973), 148.

[11] Nelson Goodman, "The Emperor's New Ideas," in _Language and Philosophy_, ed. S. Hook (New York: New York University Press, 1969); reprinted in N. Goodman, _Problems and Projects_ (Indianapolis: Bobbs-Merrill Company, 1972), 77.

conventional language. All these critics, in rejecting Sellars' alleged account of thought and language, accept the existence of thoughts as genetically prior to language. A seeming corollary of this is the claim that we have concepts prior to language, and that we use symbols prior to language, that there are "natural signs" prior and independently of "conventional signs,"[12] and, to borrow the title of Fodor's book,[13] there is a "language of thought" prior to the language of speech.

I had similar misgivings about Sellars' position, but after much reflection I would not make such interpretations of Sellars, at least not in these ambiguous, vague, and somewhat elliptical ways. I wouldn't even use the same formulations which Sellars himself actually uses about his views, and not without disambiguation, and setting the theses in a context. How could Thurston, for example, make his claim be consistent with a passage such as:

> The 'linguistic model' begins to look far too narrow and specialized to capture the nature of thinking, even at the strictly human level--let alone in the sense in which animals think.[14]

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[12] Addis, L., "Natural Signs," Review of Metaphysics 36 (1983): 543-568.

[13] J.A. Fodor, The Language of Thought (New York: Thomas Y. Crowell Company, 1975).

[14] Sellars, "The Structure of Knowledge," 304.

I grant that a limited reading of Sellars would suggest the interpretation that thought is dependent on language, especially if it is based of his celebrated "Empiricism and the Philosophy of Mind", where we find the notorious passage cited by Thurston:

> all awareness of sorts, resemblances, facts, etc., in short, all awareness of abstract entities--indeed, all awareness even of particulars--is a linguistic affair."[15]

But a more extensive reading of Sellars would unearth such passages as: "there is a legitimate sense in which animals can be said to think."[16]

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[15] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 160.

This same passage is cited by R. Rorty as evidence for the claim that Sellars denies the existence of a pre-linguistic awareness. See his Consequences of Pragmatism (Minneapolis: University of Minnesota Press, 1982), xx. However, in Philosophy and the Mirror of Nature (Princeton: Princeton University Press, 1979), 182-192, Rorty notes a distinction between "awareness-as-discriminative-behavior" and "awareness as what Sellars calls being 'in the logical space of reasons, of justifying and being able to justify what one says'" (182). He correctly notes that in the Sellarsian passage only the latter type of awareness is denied to pre-linguistic creatures.

[16] Sellars, "The Structure of Knowledge," 303.

Since Thurston cites both (and only) Sellars' "Empiricism and the Philosophy of Mind" and "The Structure of Knowledge" for h~~is~~er interpretation, it is puzzling why ~~he~~ she doesn't try to reconcile his interpretation with this seeming counterexample. There are also the following types of clarifying passages in Sellars: "For if one ties thinking too closely to language, the acquisition of linguistic skills by children becomes puzzling in ways which generate talk about 'innate grammatical theories'. Not all 'organized behavior' is built on linguistic structures. The

Sellars comes to grips with these misinterpretations of his position only after 1980 in his two essays "Behaviorism, Language and Meaning" and "Mental Events."[17] His opening statement in "Mental Events" is:

> I find that I am often construed as holding that mental events in the sense of thoughts, as contrasted with aches and pains, are linguistic events. This is a misunderstanding. What I have held is that the members of a certain class of linguistic events are thoughts. The misunderstanding is simply a case of illicit conversion, the move from 'All A is B' to 'All B is A'.[18]

Sellars is clearly expressing the view that there are thoughts which are independent of language. In "Behaviorism, Language and Meaning," he tells us that:

> Thus viewed from the standpoint of methodology, verbal behaviorism is perfectly compatible with the idea that there are pre-linguistic representational activities.
>
> Indeed, the ability to have primitive representational episodes might be not only pre-linguistic, but innate.[19]

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most that can be claimed is that what might be called 'conceptual thinking' is essentially tied to language, and that, for obvious reasons, the central or core concept of what thinking is pertains to conceptual thinking." Ibid.

[17] Wilfrid Sellars, "Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 61 (1980): 3-30; idem, "Mental Events," Philosophical Studies 39 (1981): 325-345.

[18] Ibid., 325.

[19] Sellars, "Behavior," 15.

It is clear that Sellars does not deny pre-linguistic representational abilities, as Marras, for example, seems to contend quite explicitly.

How is this misunderstanding to be explained? It has something to do with the way Sellars characterizes a language, and how he determines which characteristics are essential to it and which ones are not. In "Behaviorism, Language and Meaning" and "Mental Events," Sellars introduces the notion of a Representational System (RS), of which a Language (L) is a species, by which "the organism constructs _maps_ of itself in its environment, and locates itself and its behavior on the map."[20] He adds,

> Such representational systems (RS) or cognitive map--makers, can be brought about by natural selection and transmitted genetically, as in the case of bees. Undoubtedly a primitive RS is also an innate endowment of human beings. The concept of innate abilities to be aware _of_ something _as_ something, and hence of pre-linguistic awareness is perfectly intelligible.[21]

But isn't this last sentence in contradiction with, "all awareness of sorts, resemblances, facts, etc., in short, all awareness of abstract entities--indeed, all awareness even of particulars--is a linguistic affair"?[22] Before accusing Sellars of a contradiction, the more sympathetic approach is to accuse Sellars of a carelessness of formulation and of an ambiguous use of words. It is the latter approach that I will take.

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[20] Sellars, "Mental Events," 336.

[21] Ibid., 336.

[22] Sellars, "Philosophy of Mind," 169.

The source of the muddle lies in a failure by Sellars to remind the readers in the appropriate contexts of the distinction between a Representational System and a Language. And because he rarely writes about thoughts with an RS context presupposed, but with a clear L context presupposed, the result is the appearance that Sellars ascribes thoughts to language users only.[23]

I will examine both RS and L, and their relation, starting with an RS. But before I examine the details of an RS, let me just point out some of the claims made about an RS. One claim is that the necessary condition for thought (of any type) is the possession of an RS. Another claim is that RSs are possessed by some animals and pre-linguistic children, as well as by language users. Still another claim is that an RS may be a genetic endowment.

The RS-L distinction, though formulated explicitly in "Mental Events," has precursors in Sellars' writing. The first time that Sellars made a similar distinction was in "Language, Rules and Behavior", published in 1949--his fourth publication. Here he made the distinction between 'tied symbol behavior' (corresponding to RS) and 'rule-regulated symbol behavior' (corresponding to L).[24] In Science and Metaphysics,[25] Sellars stresses the distinction between 'non-conceptual representations' and 'conceptual representations'. So the distinction seems to be something that may have been presupposed by Sellars in all his writings.

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[23] However, one commentator, William Rottschaefer, who had the benefit of reading Sellars' "Mental Events" and "Behavior, Language and Meaning," defended Sellars from Marras' accusation that Sellars denies the existence of pre-linguistic symbolic structures. See his "Verbal Behaviorism and Theoretical Mentalism," Philosophical Research Archives 9 (1983), 525.

How does this distinction between RS and L shed light on the misleading passages in Sellars? Let me explain it this way. RS can be viewed as a truncated analogue of L. As such, many concepts appropriate to L will also be appropriate in an analogous manner to RS.

To make a distinction between concepts appropriate to L and RS, I will use Sellars' device of placing a prefix to a word to represent the RS analogue of an L concept. In doing this, I want to point out that Sellars' own practice here is ambiguous. He uses the 'ur-' prefix convention in some places to designate a pre-conceptual ability;[26] but at other places he uses it to designate a primitive form of a concept.[27] In view of this ambiguity, I will use the prefix 'ur-', to designate a primitive concept of L, and the prefix 'rs-' to designate an analogue in RS.

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[24] Wilfrid Sellars, "Language, Rules, and Behavior," in John Dewey: Philosopher of Science and Freedom, ed. Sidney Hook, (New York: The Dial Press, 1949), 301.

[25] Wilfrid Sellars, Science and Metaphysics: Variations on Kantian Themes (London: Routledge and Kegan Paul, Ltd., 1967), ch. 1 and appendix.

One source of the misunderstanding of Sellars can, then, be explained by a failure to note, or appreciate the 'tied symbol behavior' (RS) versus 'rule-regulated symbol behavior' (L) distinction.

But another source of misunderstanding may be due to Sellars' terminology. Sellars uses psychological verbs and their nominalizations, for the most part, to characterize only the behavior of humans with a language because he believes that the necessary condition for ascribing appropriate psychological states to a mature human subject is that the subject possesses a language. Thus, Sellars ascribes awareness, thoughts, knowledge, beliefs, etc. (in a primary sense) only to language users. And he denies that these ascriptions--in the primary sense--can be made to pre-linguistic animals and children. Of course Sellars' manner of speaking goes counter to a widespread linguistic practice of using psychological verbs and their nominalizations to characterize animal behavior. So the impression is left in the reader's mind that Sellars denies psychological states to pre-linguistic children and animals.

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[26] Wilfrid Sellars, "Some Reflections on Language Games," Science, Perception and Reality, 334.

[27] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 12.

But such a conclusion is only a half-truth. For, in fact, Sellars has always claimed that psychological ascriptions can be made to pre-linguistic children and animals in a derivative, analogous manner; as is clearly presented in the following passage:

> Not all 'organized behavior' is built on linguistic structures. The most that can be claimed is that what might be called 'conceptual thinking' is essentially tied to language, and that, for obvious reasons, the central or core concept of what thinking is pertains to conceptual thinking. Thus, our common-sense understanding of what sub-conceptual thinking--e.g., that of babies and animals--consists in, involves viewing them as engaged in 'rudimentary' forms of conceptual thinking. We interpret their behavior using conceptual thinking as a model but qualify this model in ad hoc and unsystematic ways which really amounts to the introduction of a new notion which is nevertheless labeled 'thinking'. Such analogical extensions of concepts, when supported by experience, are by no means illegitimate. Indeed, it is essential to science. It is only when the negative analogies are overlooked that the danger of serious confusion and misunderstanding arises.[28]

It is clear, then, that Sellars ascribes thinking, or, more precisely, in my new terminology, 'rs-thinking' to pre-linguistic children and animals. What is not clear, as the above passage expresses, is the difference between a Language and a Representational System. Let's turn to this task.

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[28] Sellars, "Structure of Knowledge," 304.

## III. REPRESENTATIONAL SYSTEMS AND LANGUAGE

In this part I want to demarcate an animal representational system, RS, which suffices for the occurrence of a 'mental event', from a conventional human language, L. Such a demarcation is implicit in Sellars' writings, but it is explicitly presented only in his recent article "Mental Events". A great deal of obscurity has been removed for me from Sellars' writings by this essay. Understanding this demarcation has helped me to understand much of Sellars' previous writings, and many things have fallen into place. This demarcation enables us to appreciate Sellars' insistence over the years that the presence of concepts is totally dependent on the presence of a conventional language.

A demarcation between an RS and L will enable us to understand the following claims, which, I believe, Sellars makes.

1. An L is a species of RS.
2. Some animals have an RS.
3. No non-human animal (in fact) has L.
4. No non-human animal (in fact) has concepts.
5. 'x has concepts' is equivalent to 'x has L'

In the following discussion, I am assuming that we are dealing with animals having the capacities of at least rats. I am also assuming that a teleological description of, for example, rat behavior is appropriate; specifically, that it is appropriate to describe a rat, for example, as wanting something, as searching for something, as avoiding something, and so on.[29] It is with this kind of background assumption that the following discussion proceeds. In one sense, it explains why teleological descriptions are appropriate.

Minimally, to have an RS something must represent something else. Call the representing state a "symbol" and the represented thing an "object." But immediately Sellars rejects any claim that such a correlation, even a multitude of such correlations, is sufficient for an RS. Note that this objection is enough to indicate for us that Sellars would reject a "private language" as depicted by Wittgenstein. Such a purported "language" was to consist of the sign 'E' standing for some private state or object. The privacy here is not relevant. Sellars would also reject a so-called "public language" as a language, which consisted of the sign 'E' standing for some public state or object. But worse, neither of these so called 'languages' would even qualify to be RSs. What more is needed is a variety of kinds of correlations--a complexity. He suggests that in order to have an RS "this correlation may essentially involve other correlations--thus between it and other representational states and between representational states and actions."[30] He presents this more explicitly elsewhere:

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[29] Charles Taylor, Explanation of Behaviour (New York: Routledge & Kegan Paul, 1964).

> To be sure, the child must also acquire the ability to respond to cases with the right words, but until these response patterns have been integrated with intra-linguistic moves and language-departure transitions, they have no conceptual character and do not even count as labels.[31]

So far, then, Sellars is claiming that an organism in order to have an RS must have, as necessary conditions, the following three characteristics:

(i) An organism correlates symbols with objects which are in the environment (or in itself).

(ii) An organism correlates symbols with other symbols.

(iii) An organism correlates symbols with physical states, normally movements.

All these correlations are to be understood as causal relations. In addition, (ii) is to be understood as an association of symbols, and can be called a 'Humean inference'.[32] He adds that these symbols in order to be functioning in an RS must have propositional form, i.e., these symbols must "represent an object and represent it as of a certain character."[33] The fact that our language is of the subject-predicate form, he implies, is an accidental feature, and does not by its presence demarcate an L from an RS. The function of predication could be accomplished by means other than using a separate predicate word: for example, by the fact that a symbol itself has a certain character. Thus it is possible to represent the fact that a car is white by writing the word 'car' in a special way--let's say by using a particular font, or by writing it in a particular color, or by writing it in a particular size, or whatever. Sellars constructs such an alternative language--calling it 'Jumblese'--which dispenses with predicate words in "Naming and Saying."[34] He cautions that the idea that "the presence or absence of a subject--predicate structure marks a radical difference between linguistic and non-linguistic RSs" constitutes one of "two fundamental flaws in traditional conceptions of the mental."[35] The other flaw, which I will just mention but not discuss, is "The notion that essential to mental events is the involvement of abstract entities."[36] But in any case, the possession of sentence analogues can be ascribed to some animals: "a certain representational state of a trained rat could be said to be a 'This is a triangular' state, and hence to express the proposition _that this is triangular_."[37]

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[30] Sellars, "Mental Events," 335, #55.

[31] Wilfrid Sellars, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 120.

[32] Sellars, "Mental Events," 336, #59.

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[33] Ibid., 336, #60.

[34] Wilfrid Sellars, "Naming and Saying," in Science, Perception, and Reality, 226; also idem, "Abstract Entities," in Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967), 78.

[35] Sellars, "Mental Events," 339.

Having described an RS so far, we should compare it with Sellars' description of a conventional language. The fullest exposition of the nature of language is in "Some Reflections on Language Games";[38] but more succinct presentations are given in other writings. The following is a good description:

> Essential to any language are three types of pattern governed linguistic behavior.
> (1) Language Entry Transitions: The speaker responds, _ceteris paribus_, to objects in perceptual situations, to certain states of himself, with appropriate linguistic activity.
> (2) Intra-linguistic Transitions: The speaker's linguistic conceptual episodes tend to occur in patterns of valid inference (theoretical and practical), and tend not to occur in patterns which violate logical principles.
> (3) Language Departure Transitions: The speaker responds, _ceteris paribus_, to such linguistic concep-

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[36] Ibid., 339, #72.

[37] Ibid., 340, #77.

[38] Wilfrid Sellars, "Some Reflections on Language Games," in _Science, Perception, and Reality_.

> tual episodes as 'I will now raise my hand' with an upward motion of the hand, etc.[39]

Sellars is constructing here a model of a conventional language. It is clear to me that he lists the necessary conditions for a language, and it is clear that they are generically almost identical to the necessary conditions for an RS. So it is clear that these cannot be sufficient for L. But before I state the demarcating characteristics between an RS and an L, the above characterizations of L need some amplification and qualification.

The first crucial point is that each type of transition in L is a causal relation, as it is in RS; and in the linguistic context the intra-linguistic transitions are described as being 'inferential'--again, as they are in RS. These causal transitions are as follows. In the case of a mature language user, the language entry transition consists of being caused to respond with an observation (perception) sentence to sensorial stimuli; intra-language transitions consist of being caused to respond to the stimulus of a sentence with another sentence; while language departure transitions consist of causally responding to a sentence expressing an intention by an appropriate movement.

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[39] Wilfrid Sellars, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 81; idem, "Meaning as Functional Classification," Synthese 27 (1974), 423-4.

The second crucial point is that in each type of transition a proposition is involved, as it is in RS. Propositions are sentences or their analogues (in some medium) functioning in the perception-inference-action roles. The concept of a proposition (which some may identify with a thought) is a concept of something that is translinguistically analogical to other languages or language-like structures (see below the chapter on Behaviorism). To talk of propositions, according to Sellars, is to talk abstractly about the role a sentence plays in a language or a language analogue. What is abstracted from is the peculiar linguistic medium or vehicle of expression. As an example, "Das ist rot", "This is red", and "RED" (in Jumblese) express the same proposition by playing a similar role in the observation-inference-action transitions in their respective linguistic mediums.

The third crucial point is that in the cited passage Sellars uses the term 'transition' in contrast to 'action.' He argues that not all linguistic events are actions. Indeed such central kinds of events as the three kinds of transitions, i.e., perceptual takings, inferences, and volitions, are not actions for Sellars (and never become actions) for the simple reason that they are not the sort of thing that can be done on purpose. For example, one can decide to look in the next room, but one cannot decide to take there to be a burglar in the next room.[40] For perceptual responses are, as such, involuntary--passions rather than actions. In the case of inferences, one can infer from seeing smoke that there is a fire, but it sounds odd to say that one decides to infer that there is fire. As to volitions,

> I have emphasized that volitions are not actions but acts in the Aristotelian sense of actualities. It does not make sense to speak of willing to will to do A, anymore than it makes sense to speak of willing to feel sympathy for someone.[41]

Sellars' view of language as composed of non-actions appears at first sight to be in basic disagreement with the later Wittgenstein's, J. Austin's, and the earlier J. Searle's views that language is composed of speech actions. Sellars is rejecting the claim that the performance of speech actions is basic. Of course he agrees that humans perform speech actions, but these, according to him, are explainable by speech non-actions. And if we take stock of G. Harman's essay "Three Levels of Meaning,"[42] as does Sellars, there may not be disagreement. There may simply be different types of interests. Sellars summarizes these three levels of interest as follows:

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[40] Ibid., 420.

[41] Sellars, Science and Metaphysics, 178. Sellars' view of volitions escapes Ryle's main criticism of "the myth of volitions." Ryle criticized a view of the will as an "action of the mind", but clearly Sellars denies that willing is an action. See Gilbert Ryle, The Concept of Mind (London: Hutchinson & Co., 1949), ch. 3.

[42] Gilbert Harman, "Three Levels of Meaning," Journal of Philosophy 65 (1968): 590-602.

> One group takes as its central theme the idea that language is, so to speak, the very medium in which we think, at least at the distinctively human level. Another finds its clue in the fact of communication. Still another focuses its attention on the kinship between such linguistic acts as stating and promising and a broad spectrum of social practices.[43]

These three levels are hierarchically related: the third presupposes the second, which in turn presupposes the first. Sellars' interest is with the first; whereas Wittgenstein, Austin, and Searle, from this perspective, were interested in the third level.

An RS is, as we see, analogous to an L. Both have entry, inference, and exit transitions. And the elements of both are propositions. Included in the intra-RS transitions are transitions in conformity to inference patterns, such as, seeing smoke causing an expectation of or looking for fire; or seeing lightning causing an expectation of thunder. RS-inferences, in short, are to be characterized by causal transitions, which in the context of RS are called 'Humean inferences.

Who has an RS? Some animals and pre-linguistic children. And, as Sellars implies, language users may at times operate in a distinct RS, i.e., distinct from their conventional language. This seems to be true of musicians and painters: "One is tempted to say that the musician not only thinks about sound, but also 'in sound',"[44] and

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[43] Sellars, "Meaning as Functional Classification," 417.

> visual perception itself is not just a conceptualizing of colored objects within visual range--a 'thinking about' colored objects in a certain context--but, in a sense most difficult to analyze, a thinking in color about colored objects.[45]

So far we have described a truncated form of L which is equivalent to an RS. And it is obvious from his remarks on animal behavior that Sellars does attribute to animals an ability to have an RS. And if the having of an RS is sufficient to have thought, then animals possessing an RS have thoughts. This sign use by animals is to be understood by analogy to a conventional language. But if the term 'language' is restricted to a conventional language, then, of course, nothing else will be a 'language' unless it can be sufficiently analogous to our language. But to say that requires asking the question: What else is necessary for a conventional language which is missing from an RS?

## A. META-REPRESENTATION

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[44] Sellars, "Structure of Knowledge," 304.

[45] Ibid., 305.

What amendments are needed, then, to move from RS to L? The obvious choice is to say that reflection has something to do with it, and to say that the minimal addition needed for this is the ability to have meta-representations. The position would then be that human thought is distinct from animal thought in including meta-thoughts.

But this won't do for Sellars. We encounter passages such as the following:

> Just as animal representational systems are, so to speak, minimal, so the animal's representation of its mapping activities, its meta-representations are equally primitive or minimal.[46]

and,

> A child can have an ur-awareness of an ur-awareness which is adequate to play a role of self-awareness in primitive mapping activity, without being aware of it as a 'mental' activity; indeed without being aware of it as an 'inner' as contrasted with 'overt' representational activity. This contrast is a highly sophisticated one.
>
> Thus an ur-representation of ur-representation as representations should not be supposed to represent them as judgments, or inferences, as involving singular terms, predicates, or modalities.[47]

In view of this complication, Sellars' position is not that animals and young children do not have thoughts or meta-thoughts, but that they do not have sophisticated types of thoughts or meta-thoughts, as is expressed in the following passage:

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[46] Sellars, "Behaviorism, Language and Meaning," 15.

[47] Ibid., 15.

> ability to represent these representational episodes with any degree of adequacy might presuppose a degree of sophistication which comes only with the mastery of language.[48]

## B. MEDIATING PREMISES AND LOGICAL TERMS

The suggestion as to what else is needed for a language is given in this passage:

> the notion of a language which enables one to state matters of fact but does not permit argument, explanation, in short reason-giving, in accordance with the principles of formal logic, is a chimera.[49]

The key difference between RS and L lies, then, for Sellars, in the kinds of inferences that are possible within these systems. We could call them respectively RS-inferences and L-inferences; instead, Sellars calls them 'Humean inferences' and 'Aristotelian inferences', respectively.[50] The difference between them seems to be that Humean inferences are unmediated by, while Aristotelian inferences are mediated by premises. An example of the former is:

'Smoke here', 'fire nearby'

An example of the latter is:

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[48] Ibid., 15.

[49] Sellars, "Some Reflections on Language Games," 355.

[50] Sellars, "Mental Events," 342, #87.

'Smoke here', 'If smoke anywhere, then fire nearby', 'fire nearby'

The key difference, then, between RS and L seems to lie in the availability of mediating premises for L, but not for RS.

Immediately the objection can be raised: Hasn't Sellars granted to animals the ability to entertain propositions; hence, premises? He has, indeed. So the presence or absence of mediating premises is not the key difference. The crucial difference lies in the nature of these mediating premises, and in the nature of the available propositions generally. The key is that the sentences of L contain logical and modal terms, such as: 'not', 'and', 'or', 'implies', 'equivalent', 'all', 'some', 'necessarily'; and such meta-words (i.e., a syntactical and semantical vocabulary) as: 'sentence', 'judgment', 'subject', 'predicate', 'operator', 'means', 'valid', etc. So Sellars' claim becomes minimally that a necessary condition for L is the availability of a logical vocabulary.

I should point out that the staunchest defender of the private language thesis, Henri-Neri Castañeda, agrees with this understanding of a language:

> Certainly Wittgenstein is entitled to define 'private language' as he pleases. And if on his definition a private language has no logical words, or only a sign

> 'E,' I agree that private languages are impossible.[51]

## C. AUXILIARY POSITIONS

In "Some Reflections on Language Games," Sellars called mediating premises 'auxiliary positions'[52], and in "Mental Events" mentions their similarity to Quine's 'standing sentences'.[53] Let us take as an example of an auxiliary position the sentence 'All A are B'. Now from a formal point of view, from this sentence in conjunction with 'This is an A' we can deduce 'This is a B'. But the status of the sentence of the form 'All A are B' may vary from a logical or conceptual relation between the A and B, to a causal connection, to an accidental relation. To mark the distinction, Sellars introduces correlative principles of inference which are on a meta-level. These are divided by Sellars into formal and material principles of inference. Elsewhere,[54] Sellars uses the Carnapian terminology of logical rules (or L-rules), and physical rules (or P-rules). These are meant to capture, respectively, the notions of analytic and synthetic propositions. But he refrains from using the word 'analytic' because of its ambiguity. In "Is There a Synthetic A Priori?"[55] and in "Empiricism and Abstract Entities,"[56] he distinguishes a narrow and a broad definition of 'analytic'--'analytic$_2$' and 'analytic$_1$', respectively. A proposition is analytic$_2$ "if it is either a _truth of logic_ or is _logically true._"[57] A proposition is analytic$_1$ if it is "true by virtue of the meanings of the terms involved."[58] And the _meaning_ of descriptive terms, for Sellars, includes the specification of causal laws. Thus, Sellars' analytic$_1$ includes what traditionally are taken to be synthetic sentences. And for Sellars "'synthetic' will be used to mean neither logically true nor logically false."[59] Thus 'synthetic' is to contrast with 'analytic$_2$'; not with 'analytic$_1$'. Sellars has thus made possible an overlap between the synthetic and the analytic$_1$. And his formal-material distinction corresponds, then, to the analytic$_2$-(analytic$_1$ cum synthetic) distinction. Sellars himself is troubled by whether he has embraced a version of the synthetic a priori, and whether this is an offensive type of a priori. He concludes that the acceptance or rejection of a 'synthetic a priori' depends, then, on how the phrase is interpreted. And on the above interpretation, he does accept a version of it.[60]

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[51] Henri-Neri Castaneda, "Rejoinders," in Knowledge and Experience, ed. C.D. Rollins (University of Pittsburgh Press, 1966), 125.

[52] Sellars, "Some Reflections on Language Games," 330, #25.

[53] Sellars, "Mental Events," 342, #89.

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[54] Wilfrid Sellars, "Inference and Meaning," _Mind_ 62 (1953), 319.

[55] Wilfrid Sellars, "Is There a Synthetic A Priori?" _Science, Perception, and Reality_, 298.

[56] Wilfrid Sellars, "Empiricism and Abstract Entities," in _Essays in Philosophy and its History_ (Dordrecht, Holland: D. Reidel, 1975), 437.

[57] Sellars, "Is There a Synthetic A Priori?," 298.

[58] Ibid., 298.

I have been talking indiscriminately about the mediating premises as 'positions', 'propositions', 'principles', 'rules', and I should add 'norms' to this list. The language of positions is used in the context of causal responses; the language of propositions is used in talking about linguistic function; while talk of rules, principles, and norms presupposes a metalanguage and the performance of actions, which are subject to evaluation (criticism). At the moment, I don't want to enter into these distinctions. All that is important for our present purposes is that L is distinguished from an RS by the availability in L of 'auxiliary positions'.

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[59] Ibid., 299.

[60] Now, in view of this analysis, I think that R. Rorty is wrong in attributing to Sellars an adherence to a kind of analytic-synthetic distinction which was criticized by Quine. And if my contention is true, then Rorty's basic premise of _Philosophy and the Mirror of Nature_ that Sellars and Quine have not assimilated each other's insights collapses, at least in Sellars' case. See Richard Rorty, _Philosophy and the Mirror of Nature_ (New Jersey: Princeton University Press, 1979), 171.

## 1. ADDITIONAL AUXILIARY POSITIONS: VALUES

Sellars' discussion of 'auxiliary positions' in "Some Reflections on Language Games" is misleading by being restricted to a discussion of forms such as 'All A are B' and the correlative formal and material principles of inference. For as Sellars himself would acknowledge, the discussion of L should be seen from the perspective of values in general, and practical reasoning specifically.[61] Thus, talk of rules of inference presupposes the existence of such epistemic values as desire for consistency, coherence, truth, predictability, and explanation.

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[61] Wilfrid Sellars, Science and Metaphysics: Variations on Kantian Themes, 176.

Sellars talks about value statements in Science and Metaphysics[62] as occurring in "first level discourse", implying that auxiliary positions should be expanded. He regiments value statements to the form: 'Would that p' ("Let us use 'would' as our valuation operator.[63] All discourse, in fact, for Sellars, implies values. And if values are seen from a hierarchical perspective, then, for Sellars, all "ground-floor valuings . . . are dominated by an over-arching ego-directed valuing expressed, in our terminology, by: Would that I led a satisfying life."[64] He calls this the principle of Rational Egoism.[65] This is a controversial thesis, and I will not discuss it. I am not concerned here with the correctness of this specific principle, or how it relates to the moral 'Would that we led a satisfying life'. All that I am concerned with is the logic of the situation, namely that 'Would that p' sentences are basic to understanding Language.

Incidentally, I am puzzled by the fact that commentators on Sellars' theory of practical reasoning often omit even mentioning the 'Would that p' form. This is true of

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[62] Ibid., 199.

[63] Ibid., 199.

[64] Ibid., 200.

[65] Wilfrid Sellars, "On Reasoning About Values," American Philosophical Quarterly 17 (1980), 94, #129.

H-N. Castañeda, B. Aune, and W. Solomon.[66] Solomon, for example, writes: "Sellars' account of practical reasoning encompasses three main topics: (1) intentions; (2) volitions; and (3) the process of practical inference".[67] Solomon is truncating Sellars account. It actually begins with expressions of value: Would that p. And these are in the nature of wishes. If the wish is believed to be (practically) possible of realization, it becomes characterized as a desire. An intention is the desire to do the action A which it is believed will help bring about the consequence p; while a volition is the thought (the intention, so to say, whose time has come) which precedes and causes the action A.[68]

But, to repeat, my main point is that Sellars' discussion of L in "Some Reflections on Language Games" should have been expanded to include value sentences as auxiliary positions.

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[66] Hector-Neri Castaneda, "Some Reflections on Wilfrid Sellars' Theory of Intentions," in Action, Knowledge and Reality,: 27-54.

Bruce Aune, "Sellars on Practical Reason," in Action, Knowledge and Reality: 1-26.

W.D. Solomon, "Ethical Theory," in The Synoptic Vision: Essays on the Philosophy of Wilfrid Sellars, ed. Delaney, C.F., et alia, (University of Notre Dame Press, 1977): 149-188.

[67] Ibid., 162.

[68] Sellars, "On Reasoning About Values," 83.

## 2. ARE AUXILIARY POSITIONS OR RULES OF INFERENCE DISPENSABLE?

The next question to ask is: Are 'auxiliary positions' dispensable? Sellars replied: "it is conceivable that a language game might dispense with auxiliary positions altogether, though at the expense of multiplying moves."[69] This means that the function of auxiliary positions will be taken over by the correlative inference rules.

Now, are inference rules dispensable? Obviously not the formal rules--without them there would be no logic, and hence no language. But what about the material rules of inference? Most of Sellars' earliest writings are taken up by this question. And his position is that they are indispensable to any empirical language. Since Sellars' metalinguistic concerns are based on Carnap's work, his polemics are directed at Carnap's position, as expressed in the following passage. The implication of Carnap's passage seems to be that P-rules are dispensable.

> For the sake of brevity, we shall call all the logico- mathematical transformation rules of S logical or L-rules; and all the remainder, physical or P-rules. Whether in the construction of a language S we formulate only L-rules or include also P-rules, and, if so, to what extent, is not a logico--philosophical problem, but a matter of convention and hence, at most, a question of expedience. If P-rules are stated, we may frequently be placed in the position of having to alter the language; and if we go so far as to adopt all acknowledged sentences

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[69] Sellars, "Language Games," 330, #26.

> as valid, then we must be continuously expanding it. But there is no fundamental objections to this.[70]

Carnap makes two observations. The first is that P-rules are dispensable from an object language. But Carnap is not clear whether their function is to be formulated in a metalanguage, or whether it is to remain unexpressed, or whether the function itself is translatable into an extensional language. If Carnap means to assert the last position, then it is tenable only if the thesis of extensionality itself is tenable. According to Carnap, this is the thesis that:

> _a universal language of science may be extensional_; or, more exactly: for every given intensional language $S_1$, an extensional language $S_2$ may be constructed such that $S_1$ can be translated into $S_2$.[71]

An 'extension sentence' is a truth-functional sentence, and an 'extensional language' is one composed entirely of truth-functional sentences. An 'intensional sentence', by contrast, is not truth-functional, and an 'intensional language' is one which contains some intensional sentences. To deny the extensionality thesis all one need do is hold that there is at least one kind of intensional sentence which cannot be translated into an extensional one.

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[70] Rudolph Carnap, _Logical Syntax of Language_, trans. A. Smeaton (Paterson: Littlefield, Adams & Co., 1959), 180.

[71] Ibid., 245.

Now, one of Sellars' characteristics as an analytic philosopher is the rejection of the extensionality thesis for various kinds of metalinguistic sentences:

> Now I do not know of any successful attempt to define the logical modalities, the causal modalities or normative expressions in purely extensional terms, and (as already indicated) I do not think it can be done.[72]

Intensional sentences which cannot be translated include deontic sentences, semantical sentences, L-rules, and, as relevant to the present problem, P-rules. A P-rule, for Sellars, is a kind of conditional sentence which cannot be expressed either by a material implication (truth-functional) nor by Lewis's strict implication.[73] Sellars expedient is to introduce an new (arrow) symbol for an untranslatable intensional causal connector which has its own peculiar logic.[74]

Once the extensionality thesis is denied for P-rules, there is the following ambiguity to be cleared up concerning Carnap's position. If Carnap's remarks apply only to an object language, then his position can be granted; indeed, Sellars' program calls for an extensional object language-but provided that P-rules are in the metalanguage, which, in fact, is where Sellars locates them. Sellars position is, then, this:

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[72] Wilfrid Sellars, "A Semantic Solution to the Mind-Body Problem," Methodos 5 (1953), 53.

[73] Wilfrid Sellars, "Concepts as Involving Laws and Inconceivable without Them," Philosophy of Science 15 (1948), 289.

[74] Ibid., 312; see also idem, "Counterfactuals, Dispositions, and the Causal Modalities," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, (Minneapolis: University of Minneapolis Press, 1958): 225-308.

> Material rules are as essential to meaning (and hence to language and thought) as formal rules, contributing the architectural detail of its structure within the flying buttresses of logical form.[75]

The other alternative for Carnap, if the dispensability of P-rules in an object language is not to entail the extensionality thesis, or the move to a metalanguage, is to opt for leaving P-rules in a language as unformalized and implicit. But such an alternative in order to become a live option must be backed-up by arguments to the effect that ordinary language defies formalization. At best, this alternative would suggest that ordinary language is too unsystematic to warrant formalization. Sellars is sympathetic to the complexity, but not to the skepticism. The philosophical endeavor must be to regiment ordinary language through the construction of models--despite their shortcomings.

The second observation that Carnap made is that if the convention is adopted to include P-rules, the result will be a perpetual change in the meaning of descriptive words in a language. This is a correct observation, and Sellars is quite conscious of it. In fact his theory of induction, from the linguistic perspective, is developed with the end in mind of discovering and amending P-rules; which amounts to the claim that a theory of induction is a theory of how to change language. Sellars, in fact, put it almost identically: "I regard rules of inductive inference as rules for the reasoned change of a language."[76]

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[75] Wilfrid Sellars, "Inference and Meaning," Mind 62 (1953), 317.

The conclusion to be drawn from all this is that though auxiliary positions are dispensable, their correlative L-rules and P-rules are not. And this marks the distinction between an L and an RS.

## D. APING REASON

But the inclusion or exclusion of auxiliary positions or rules of inference in L locates the difference but does not express it. The difference is more fundamental. The essential demarcation between RS and L lies, as has been noted, in the availability of logical and modal words in L, and their unavailability in RS.

The obvious objection to this--an objection which I have entertained for a long time, and which I thought was the Achilles' heel of Sellars' philosophy--was to think that animal behavior displays an analogy to logical inference. And therefore, I thought, the difference between L and RS is drawn at the wrong place. But is it drawn at the wrong place?

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[76] Wilfrid Sellars, "Reply [to criticism of "Meaning as Functional Classification"]," Synthese 27 (1974), 457.

Sellars is quite aware of behavior in animals which resembles logical inference--it is what has already been referred to by Sellars as 'Humean inference', and which B. Russell described as 'animal inference'.[77] Sellars also notes that Leibniz spoke of this as a "consecutiveness which imitates reason."[78] An example of a Humean inference, it will be recalled, was: 'Smoke here', 'fire nearby'. And it resembles the Aristotelian inference: 'Smoke here,' 'If smoke anywhere, then fire nearby', 'fire nearby'. The resemblance lies in the transition from similar initial states to similar end states, i.e., from an analogous observations of 'Smoke here' to analogous mental states of 'Fire nearby'.

The objection may be pushed further. It can be conceded that the difference between RS and L is in the availability of the auxiliary positions. But this is an accidental distinction. For, after all, Sellars himself had admitted that such positions are dispensable. Their role can be taken over by the rules of inference.

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[77] Bertrand Russell, Human Knowledge: Its Scope and Limits (New York: Simon and Schuster, 1948), 182.

[78] Leibniz, "Monadology," in Leibniz: Selections, ed. Philip P. Wiener (New York: Charles Scribner's Sons, 1951), #26; Wilfrid Sellars, "Mental Events," Philosophical Studies 39 (1981), 342.

Are we to attribute an awareness of rules to animals? How would that be possible? Rules are, after all, formulated in a language. And if an animal has rules, they must be contained in a meta-RS.

Yes, the objector may continue, Sellars has conceded that animals may be said to have meta-representations. So why can't we attribute to them rules expressed in a meta-representation?

To answer this objection, we have to start by pointing out that Sellars distinguishes between rule-conforming (or rule-patterned) and rule-following (or rule-regulated) behavior. The difference between them is that rule conforming behavior does not involve the formulation of a rule as an element in conscious thought, while rule following behavior does. For example, a rat, after being trained to run a maze, has a representation of the maze in the sense that given the proper context, being in one position of the maze will trigger off a series of appropriate responses. Now contrast this with a human car driver who consults a map to guide him in his journey. The 'map' in the rat's case is not something consulted; whereas in the driver's case it is. To keep to the metaphor, the rat acts non-consciously in conformity to the path on the map; the driver acts by consciously following the path on the map.

Inference rules are, then, rules which are available for consultation. While no rules are available for consultation to an RS organism. The reason is this. A rule is, as Sellars points out, always a rule of action of the form: 'If you want to bring about the result R, then if the circumstances are C, then you must (ought, may, may not, cannot, etc.) do action A'.[79] It is because an RS organism cannot infer through the process of obeying a rule that it cannot be said to 'infer' in the primary sense of 'inference', which is 'Aristotelian inference'. As Sellars puts it, "an intra-linguistic move is not in the full sense an inference unless the subject not only conforms to but obeys syntactic rules."[80]

Why is a rule (or its analogue) not available to an animal? Sellars' answer is straightforward. An animal does not have the required logical vocabulary that is explicitly expressed by the rule formula, nor the logical connections (meanings) that are implied by the use of the rule formula.

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[79] Wilfrid Sellars, "Language as Thought and as Communication," Philosophy and Phenomenological Research 29 (1968-1969): 506-27. Reprinted in Wilfrid Sellars, Essays in Philosophy and its History, 96.

I am simplifying the matter by failing to distinguish as does Sellars between categorical and hypothetical rules; and between 'rules of ought-to-do' (rules of action) and 'rules of ought-to-be' (rules of criticism). But this is irrelevant to the present discussion.

[80] Wilfrid Sellars, "Phenomenalism," in Science, Perception, and Reality, 334.

Suppose the objector responds by claiming that logical connector analogues are available to an RS organism. For example, a rat can be trained to respond to, let's say, a pink cube. And it refuses to respond to other colors and volumes. Isn't this refusal to respond an analogue of negation?

Sellars asks this question explicitly: "How can a pre- logical RS ape the use of negation?"[81] His answer is that indeed a Humean RS organism has the resources of accepting or rejecting a proposition, but notes that we, as Aristotelian RSs, not only have the resources of accepting or rejecting a proposition, but we also have the resources of affirming or negating a proposition as well. And (our) concept of negation is not equivalent to (our) concept of rejection. The latter concept, he tells us, is more basic. Negation entails rejection, but not vice versa.[82]

Sellars argues that from our perspective, if an RS organism rejects p, this entails (for us) that it does not represent p. But from our perspective, these are equivalent for it. Now our notion of not representing p includes representing not-p. And (for us) representing not-p entails rejecting p (which is equivalent for the RS to not representing p). But not representing p does not entail the representing of not-p. Therefore, argues Sellars, "The concept of rejection is more basic than the concept of negation."[83] This is to say that our concept of negation is a richer concept than that of rejection.

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[81] Sellars, "Mental Events," 342.

[82] Ibid., 343.

This conclusion seems to be correct for yet another reason. Consider the fact that we can make a distinction between the negation of a sentence and the negation of the predicate of a sentence, i.e., 'It is not the case that p' and 'This a in not F'; whereas a Humean RS would fail to make the distinction by representing both cases through the rejection of the propositions.

If it is granted to Sellars that negation is not available to an RS organism, then it also follows that none of the other truth-functional logical constants are available to an RS organism as well. This follows from the fact that truth-functions require one primitive logical constant with negation, and all other logical constants are interdefinable with the inclusion of the negation operator. We can make even a broader generalization by saying that no conceptual propositions at all are available to an RS organism since their meanings are dependent on their logical connections with other propositions. And as a corollary, no proposition which entails a truth-functional proposition is available to an RS organism. Now normally a truth-functional logic or a truncated form (which includes negation) is part of most other logics, such as modal and intuitive logics. If that is the case, then none of these dependent logics are available to an RS organism either.

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[83] Ibid., 343.

A specific case concerns Sellars' material rules of inference which are correlative to 'causal laws'. He writes, "For a lucid presentation of the fundamentals of a logic of causal modalities, see Burks . . . "[84] In Arthur Burks we are given the following axiom: "a causal implication [materially] implies a material implication."[85] The significance of this is that an RS organism, by this reasoning, lacks the concept of a causal law because it lacks the correlative material rule of inference.

There is one last point which must be cleared up. All that has been said so far seems to be compatible with the view that human beings, in possessing a language, are able to perceive negative facts. This is not Sellars' view. All logical operators, as well as various modal and semantical words, are ultimately to be located in the metalanguage. Their role is to enable us to move from propositions to propositions. At the object level there are only positive sentences which picture reality. Thus, a form such as 'not-p' is to be understood as the denial of the truth of p.[86]

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[84] Sellars, "Counterfactuals, Dispositions, and the Causal Modalities," 272.

[85] Arthur Burks, , "The Logic of Causal Propositions," Mind 60 (1951), 272.

With these observations in place, I can make the following conclusions on the difference between RS and L (using organisms). Although both use the entry to RS, intra-RS, and RS departure transitions, and although both use rs-propositions, and both have meta-representations; because primitive RSs lack a logical vocabulary, RS organisms can, at best, conform to inference rules. This has the appearance of aping reason. But only an L has a logical vocabulary which enables an L organism to follow rules--both formal and material. And here is a crucial point for Sellars. To have words in one's vocabulary that are essential in formal and material inferences is to have concepts:

> the conceptual meaning of a descriptive term is constituted by what can be inferred from it in accordance with the logical and extra-logical rules of

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[86] See Wilfrid Sellars, "On the Logic of Complex Particulars," Mind 58 (1949), 317-318.

> inference of the language (conceptual frame) to which it belongs.[87]

But if we expand on this by including such auxiliary positions as expressions of value and obligation, then the broader formulation becomes: "to express a concept is to be relevant to inferences which can be drawn from statements in which the expression occurs."[88]

## IV. LANGUAGE AND CONCEPTS

A major contention of Sellars' philosophy is that the possession of concepts requires the possession of a language. And anything that does not possess a language, does not possess concepts. Which is to say that the possession of concepts is materially equivalent to the possession of language. Hence, since animals and infants do not possess a language, they do not possess concepts.

This seems to go counter to a widespread usage, especially by psychologists, which grants to animals and pre-linguistic children the possession of concepts--albeit rudimentary concepts which are truncations or analogues of linguistic concepts. The following passage is typical of how psychologists use the word 'concept':

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[87] Sellars, "Is There a Synthetic A Priori?," 317.

[88] Wilfrid Sellars, "The Language of Theories," in Science, Perception, and Reality, 115.

> Concept formation refers to the process of discovering some characteristic that is common to a series of discrete objects, and that sets off these objects from all other objects. A concept refers to the description of this common element.[89]

Even psychologists who write books with titles like Language and Thought use the word 'concept' in this way: "any concept is the internal representation of a certain class of experiences",[90] and "a person has learned a concept when he can with a high degree of reliability discriminate between instances and noninstances."[91]

These descriptions of a concept by psychologists, as far as I can tell, do not differ from talk of 'stimulus discrimination' and 'stimulus generalization'. It seems that the statement 'S has a concept of C' is materially equivalent to 'S has generalized C' or 'S can discriminate C'. Peter Geach has made a similar observation about psychologists' use of 'concept': "they would say that an animal has acquired a concept if it has learned a discriminative response to some feature of its environment."[92] Sellars grants to animals ""discriminative behavior" such as is found in white rats",[93] but he does not grant them concepts. His use of 'concept', then, is different; in fact, restricted to language users.

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[89] D. Krech and R.S. Crutchfield, Elements of Psychology (New York: Alfred A. Knopf, 1962), 464.

[90] John B. Carroll, Language and Thought (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964), 81.

[91] Ibid., 82.

[92] Peter Geach, Mental Acts (New York: Humanities Press, 1957), 17.

It is obvious that the word 'concept' is used in different ways not only by different groups of people, but often by individuals within a certain group, e.g., by philosophers. To avoid talk at cross-purposes the term has to be disambiguated. And since we are concerned with Sellars' philosophy, we must try to understand how he uses this word.

Some people would accept the formula:

> 'S has a concept of x' if and only if 'S has a thought about x'

or, put otherwise,

> The necessary and sufficient condition of having concepts is the possession of thoughts.

This, with appropriate commentary, is acceptable to Sellars. But if it is conjoined with R. Chisholm's view that "Thoughts would be intentional even if there were no linguistic entities,"[94] then the distinction between RS-thoughts and L-thoughts would have to be introduced.

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[93] Wilfrid Sellars, "The Identity Approach to the Mind-Body Problem," in Philosophical Perspectives, 207.

[94] Roderick Chisholm, "Intentionality and the Mental (Sellars-Chisholm Correspondence)," 533.

Sellars could agree with Chisholm that there could be RS-thoughts even if there were no language.

For some people any word of a language expresses a concept. For example, Geach states that it is "a sufficient condition for James's having the concept of so-and-so that he should have mastered the intelligent use (including the use in made-up sentences) of a word for so-and-so in some language.[95] This use of 'concept' is too broad for Sellars. His synonym for this use is 'sense' (and he mentions G. Frege as his source for this usage.[96]

Sometimes the word 'concept' is restricted to a subset of words in a language. For Frege all grammatical predicates stand for concepts; whereas subjects name objects. At one point Sellars expressed the intention to use 'concept' in this sense: "I am strongly inclined to follow his [Frege's] lead and limit the term "concept" to predicative senses."[97] But this is not his preferred usage in most writings. In "Language of Theories," for example, he writes, "If one begins by listing a variety of types of expression which can without too much discomfort be said to express concepts--noun expressions, predicative expressions, logical connectives, quantifiers . . ."[98]

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[95] Geach, Mental Acts, 12.

[96] Sellars, "Language of Theories," 115.

[97] Wilfrid Sellars, "Abstract Entities," in Philosophical Perspectives, 78.

In "Conceptual Change," Sellars distinguishes two uses of the word 'concept':

> In one of its less controversial uses, a concept is something a person has, namely a certain ability, and is always the concept of something, where 'something' is used in the broadest possible sense.[99]
>
> There is, however, another use of 'concept' in which one speaks of certain entities as concepts in a sense which, though acknowledging that they are items which thoughts can be "of" (and, indeed, uses this fact to pick them out), takes the relation between these entities and particular minds to be an "external one.[100]

The second use has two interpretations.

> Some philosophers . . . have held that concepts in the second sense are "objective" in that their existence is independent--not only of this mind or that mind, but of mind uberhaupt. Others, while stressing their independence of particular minds have stressed objectivity in the sense of inter-subjectivity (compare the objectivity of institutions), and have suggested that conceptual entities are mind- dependent in this broader sense.[101]

The first use makes a concept dependent on a particular mind. The second use makes a concept independent of a particular mind. And this can mean that concepts are independent of all minds; or that they are independent of any particular mind--though dependent on some mind or other. The last is Sellars view.

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[98] Sellars, "Language of Theories," 115.

[99] Wilfrid Sellars, "Conceptual Change," in Essays in Philosophy and its History, 176.

[100] Ibid., 177.

[101] Ibid., 177.

I think that these questions about the objectivity or subjectivity of concepts are secondary questions. The primary question is to specify the nature of concepts. This is the problem of specifying the category or 'genus' of a concept. Is it an object? a relation? a quality? a function? a disposition? a capacity? or whatnot. Once this question has been answered, then the question of objectivity can be raised.

The essential trait of a concept is that it be a term in a sentence playing a necessary part in inferences: "to express a concept is to be relevant to inferences."[102] But this formulation is misleading in view of the distinction between Humean and Aristotelian inferences. What Sellars means to say is that a concept is expressed by a term in a sentence which is essential to an Aristotelian inference. And the necessary constituents of a language are the three types of transition patterns, auxiliary positions, and the principles of inference. Thus, for example, because the word "alas" has no (relevant) "inferential force" it is not a concept.[103]

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[102] Sellars, "The Language of Theories," 115.

[103] Ibid., 115-116.

To answer the categorial question, to have a concept (in the primary sense) is to have an ability to use words in the appropriate inference patterns. Thus W. Robinson's attempt to capture Sellars' idea of a concept, given as: "A concept is a mind dependent ability to be in a state which corresponds to a property"[104] won't do. This definition would be compatible with what an RS organism has. But the introduction of the term 'concept' by Sellars is meant to demarcate something in human language users from what animals possess. This sentiment is well expressed by Geach in his criticism of the psychologists' use of 'concept':

> What is at issue here is not just the way the term "concept" is to be used, but the desirability of comparing these achievements of rats and dogs with the performance of human beings who possess a concept of triangle; the psychologists I am criticizing want to play down the difference between human and animal performances, and I want to stress them.[105]

I think this is exactly Sellars' view.

## A. CONCEPTS AND INFERENCE

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[104] William S. Robinson, "The Legend of the Given," in Action, Knowledge and Reality, 89.

[105] Geach, Mental Acts, 17.

In the previous section, I have explained that a language involves the possession of a logical vocabulary and inferences. In this section I want to spell out these logical structures for particular categories.

Let's start with a proposition p. To have a concept of p, by the requirement of formal rules of inference, we should be able to know various logical equivalences and implications; as that 'p' is materially equivalent to 'not not p', and that 'p' materially implies 'p or q'; that 'p and q' materially implies 'p', etc.

Next, let's consider 'physical kinds', 'particulars', or 'individuals' generally. First, any particular must have a non-relation property, "it doesn't make sense to speak of individuals which stand in relations, but have no qualitative character."[106] Second, these materially imply various capacities and dispositional, properties expressible by causal and counterfactual implications. For example, the concept of a match materially implies such counterfactuals as 'If x is a match, and if x were scratched, then x would light'. And such counterfactuals depend on the truth of such causal laws as 'All matches if scratched, in circumstances C, light.' Indeed the concept of a physical kind materially implies clusters of such causal and counterfactual propositions.[107]

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[106] Wilfrid Sellars, "Epistemology and the New Way of Words," The Journal of Philosophy 44 (1947), 655.

Next, concerning the concept of universals or properties, Sellars makes three claims. The first is that the meaning of a universal is dependent on the type of particular which exemplifies it. Second, since the concept of a particular, as we saw above, depends on the physical laws into which it enters, Sellars, after presenting his arguments, concludes, "universals and laws are correlative, same universals, same laws, different universals, different laws."[108] Third, Sellars argues that the concept of a generic property is a disjunctive concept: "the generic is, at bottom, the disjunctive."[109]

> Basic factual predicates come in families of competing predicates, one or other of which must be satisfied by every object which can satisfy a predicate of that family. If a is not $f_1$ it must be $f_2$ or $f_3$.[110]

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[107] See Wilfrid Sellars, "Counterfactuals, Dispositions, and the Causal Modalities," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, (Minneapolis: University of Minneapolis Press, 1958): 225-308.

[108] Wilfrid Sellars, "Concepts as Involving Laws and Inconceivable without Them," Philosophy of Science 15 (1948), 296.

[109] Wilfrid Sellars, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 129.

[110] Wilfrid Sellars, Science and Metaphysics, 119-120.

For example, the concept of a color is that of something being white or orange or violet or blue or red or . . . green. This means that to have the concept of something being red is to have the ability to infer that this thing is not green, not blue, not yellow, etc.--"it is obvious that being (an expanse of) red implies not being (an expanse) of green."[111]

## V. HOLISM

Furthermore, since the units of inference are propositions, it follows that concepts are imbedded in various propositions. And if we try to think through the extent of conceptual interconnections which the characterization of propositions, particulars, and properties entail, we will come to the Sellarsian conclusion that to have one concept implies having many; indeed, it implies having a language game. This is Sellars holism about concepts. So, "'conceptual structure' in this sense refers to language games."[112] On the one hand this holism is antithetical to the logical atomism view espoused in

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[111] Wilfrid Sellars, "Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 61 (1980), #126.

[112] Sellars, Science and Metaphysics, 132.

Wittgenstein's Tractatus[113] that " 2.061 States of affairs are independent of one another. 2.062 From the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another." On the other hand, Sellars does not mean to espouse a Hegelian view that the meaning of a concept lies in the Absolute.[114] The clue to Sellars' holism is provided by the Wittgensteinian phrase "language game." In this sense, each person could, first, have many languages; for example, a Manifest Image and the Scientific Image. And as H. Brown points out in his commentary on Sellars' holism, "we can view the individual who learns a second (or third, etc.) science as learning a new language."[115] Second, Sellars speaks about degrees of mastery of a language. The implication of this is that it is possible to know a language in disjoined fragments; thus, denying any implications for absolute or total holism. In conclusion, the point of this section has been to disambiguate the concept of a 'concept', and to delineate

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[113] L. Wittgenstein, Tractatus Logico-Philosophicus, trans. D.F. Pears & B.F. McGuinness (London: Routledge & Kegan Paul, 1961).

[114] This is probably what R. Rorty wanted to hear when he introduced the Carus lectures of Sellars by expressing an anticipation of a Hegelian synthesis.

[115] H. Brown, "Sellars, Concepts and Conceptual Change," Synthese 68 (1986), 291.

Sellars use of it. His use is that a concept is any word in a sentence which is relevant to inferences. And I pointed out the kinds of inferences that Sellars has in mind. The upshot is that the possession of concepts is correlative with the possession of a language. And the implication of such a requirement of inferential connections needed for the possession of concepts leads to a holism about language, but, as I suggested, it need not be as extensive as the Absolute.

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# CHAPTER 6

# PHILOSOPHICAL PSYCHOLOGY

A defense of Materialism should give an account of mental (or psychological) phenomena. And in order to give such an account, these phenomena must first be identified. But this is complicated by the number of criteria offered for their identification.[1]

To begin with, a distinction can be made between ontological and epistemological criteria. Of the ontological criteria, there are Brentano's criterion of intentionality[2] and Descartes' criterion of non-extensionality or non-spatiality for mental phenomena, and Chisholm's criteria for psychological sentences. Of the epistemological criteria, there is "direct awareness" which has as instances such phenomena as privileged access, incorrigible awareness, indubitable awareness, private awaremess, and so on.

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[1] I follow the distinctions made by Jaegwon Kim in his "Materialism and the Criteria of the Mental," Synthese 22 (1971): 323-345.

[2] R. Chisholm is responsible for popularizing Brentano's criterion in the English speaking world. However, his interpretation of Brentano's criterion may be inaccurate according to Linda L. McAlister in her article "Chisholm and Brentano on Intentionality," Review of Metaphysics 28 (1974): 328-338.

Sellars' approach is epistemological. However, it ties in to the ontology via the necessary condition for the possibility of knowing. This ontological condition is the possession of a conventional language. Given this approach, Sellars can agree with Brentano's thesis that the mark of the mental is intentionality. But since conceptual intentionality requires language, Sellars can also agree with Chisholm that conceptual intentionality is to be found in language. However, such an agreement with Chisholm is superficial. Chisholm searches for intentionality in kinds of sentences; whereas Sellars finds intentionality in the very function of sentences, as will be explained.

Given Sellars' assumption of the primacy of a public language for the conceptual awareness of any kind, this creates a problem of accounting for how introspective awareness is possible. Specifically, Sellars has to account for our introspective awareness of sense impressions and thoughts. Although the strategy for accounting for introspection is similar for both sense impressions and thoughts, there is a difficulty in lumping them together. This stems from the differences in the concepts of sense impressions and thoughts. In this chapter I will concentrate on the concept of thoughts, their intentionality, and how awareness of (private) thoughts is possible. Sense impressions will be covered in the chapter on perception.

## 2 I. TAXONOMY OF PHILOSOPHICAL PSYCHOLOGY

I will begin by locating Sellars' views on philosophical psychology among those popularly held today. This exercise is valuable for taking stock of the range of plausible alternatives, for assessing the merit of Sellars' position in relation to them, and for suggesting as yet untried alternatives.

Contemporary debate about philosophical psychology is split along several lines. The major divisions, as I see it, are between what are called these days peripheralists and centralists. Peripheralists limit their investigation to either introspection and/or gross publicly observable phenomena. Their distinguishing trait is in either the exclusion of theoretical claims altogether (e. g., later Wittgenstein, "bracketing" phenomenologists) or the exclusion of irreducible theoretical claims (e. g., Skinner, logical positivists). Centralists, by contrast, extend their sphere of interest to include neurophysiological variables and irreducible theories. Now if we abstract from the peripheralists and centralists the introspective approach, we will be left with what are called by Sellars Philosophical (Logical) and Methodological (Scientific) Behaviorists[3]--a demarcation between those who allow only reducible theoretical terms and those who allow also irreducible theoretical terms, respectively.

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[3] Wilfrid Sellars, Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 184-185.

Another division which can be abstracted from the peripheralist-centralist dichotomy is between "bottom-up" and "top-down" approaches. The top is the psychology of common sense or, as it is currently called, "folk psychology" (roughly, a component of Sellars' Manifest Image). Its distinctive trait is in explaining human behavior in terms of intentional states, such as desires and beliefs. The bottom is neuroscience. Working from the bottom means that one tries to connect the laws of neuroscience with the laws of higher level functioning. Working from the top means working in the opposite direction.

Cognitive science[4] occupies a middle position in this debate. It posits a representational system which mediates between the stimulus and response, and which may be constituted by some (as yet unknown) neurophysiological structures. The claim of those working in the field of artificial intelligence is that these representational structures can be modeled by a Turing machine such as the computer.[5]

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[4] Perhaps the better phrase would be 'cognitive sciences'. The reason for calling it 'cognitive science' is that a number of disciplines seem to be converging on a set of assumptions on how to understand the mind. These disciplines are, according to Howard Gardner: philosophy, linguistics, anthropology, neuroscience, artificial intelligence, and psychology (The Mind's New Science (New York: Basic Books, 1987), 37). The consensus is that mental activity is representational and that it can be profitably studied by computer simulation.

Within these lines of division, I would call Sellars a cognitive scientist. This is so because he posits thoughts as irreducible theoretical states and uses the computer as a model.[6]

Once we start to talk seriously about representational systems we can get bogged down over the word 'representation', especially if we want to talk about the 'cognitive' life of a planarian (a type of worm), the 'cognitions' of a plant, or even the 'cognitions' of a computer. If we want a common term for these activities or states, 'cognition' or 'representation' seems to connote too much sophistication; we would do better to switch talk to 'information processing', as is commonly done.

A great deal of current debate is about the nature of the posited information processing. These debates can be viewed from the perspective of (i) the types of information processing subsystems, (ii) which information processing systems are innate, (iii) the extent to which these information processing systems are analogous to a public (conventional) language, and (iv) the ontological reality of propositional attitudes.

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[5] There are two famous objections to the view that psychological phenomena can be simulated by a Turing machine. The first is John Searle's example of a Chinese language translator; the second is Ned Block's example of the Chinese population acting as the components of a computer. See John Searle, "Minds, Brains and Programs," The Behavioral and Brain Sciences, 3 (1980): 417-424; and Ned Block, "Troubles with Functionalism," in Readings in Philosophy of Psychology, ed. Ned Block, vol. 1 (Cambridge, MS: Harvard University Press, 1980).

[6] Sellars, Science, Perception and Reality, 33, 50-59, 101, 219, 313.

Concerning (i), it is clear that Sellars would distinguish between sensorial information processing systems, innate (instinctual) animal representational system, a learned animal representational system, and a learned human conceptual system (public language). He would also obviously recognize an information storage system or systems (memory) and some kinds of information retrieval, creation, and anticipation systems.

Within these informational systems Sellars distinguishes sensorial states (sensa, qualia) and functional states. The cogency of such a dualistic stance is one of the hotly disputed issues. Some theorists try to ignore or eliminate talk of sensorial states altogether and make functional states be exhaustive of all information processing. Such a view is called functionalism, and is probably the dominant view in cognitive science.

Ned Block, in his review and critique of functionalist theories,[7] makes a number of distinctions within functionalist theories. The most basic, it seems to me, is between what he calls Functionalism and Psychofunctionalism.[8] The former he describes as an a priori functionalism which is related to the logical behaviorist's endeavor to define mental terms by physicalist terms. The difference is that the physicalistic terms in Functionalism become physicalistic functional terms. Psychofunctionalism, by contrast, is described as empirical functionalism in which mental states are understood to be functional states posited as scientific hypotheses. Using Block's classification, Sellars is a Psychofunctionalist about thoughts.

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[7] Block, "Troubles with Functionalism." There is a need for a clarification of Block's characterization of any functionalism as having an equivalent Ramsey transcription: "All functional-state identity theories (and functional-

Turning now to the innate perspective (ii), and considering only the status of thoughts, the extremes are Jerry Fodor's posit of an innate language of thought, the position of Noam Chomsky who posits an innate universal "grammar", and the position of Sellars for whom (conceptual) thoughts are not innate but learned.

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property identity theories) can be understood as defining a set of functional states (or functional properties) by means of the Ramsey sentence . . ." Ibid., 272. Evidently Block has not considered the controversy between objectual and substitutional interpretation of quantified variables. Since Sellars adopts a substitutional approach, the Ramsey transcription is an intermediary sentence which must be cashed in by names for the variables. If the variables are cashed in by names of the brain or parts of the brain, then the Ramsey technique is a technique to exhibit ontological commitment, and is acceptable to Sellars.

[8] Ibid., 271.

As concerns animal representational systems (which humans presumably share with animals), Sellars considers them to be innate capacities.

As concerns the sense organs, the positions of James Gibson, Richard Gregory, and Patricia Churchland are that they contain innate sensorial computational devices. Here one can make the Aristotelian distinction between 'proper sensibles' and the 'common sensibles'. It seems that Sellars could identify the common sensibles as components of animal representation, and it seems that Sellars would not have any objections to describing them as analogically intentional.

Turning finally to the problem of how analogous the information processing systems are to a public language (iii), one extreme position for understanding thoughts is to understand conceptual thoughts as isomorphic to sentences. This view is found in most functionalist analyses of thoughts. It is the view of Sellars, Geach, Aune, Castañeda, Rosenberg, Fodor, Chomsky, Clark, Putnam, and Armstrong, among others.

As far as I am aware, there are only a few writers who have taken the option of making non-verbal human thoughts less than isomorphic to sentences; among these are

Paul and Patricia Churchland[9] This is also where I will differ from Sellars. The position which I am proposing is an extreme one, namely, that non-verbal human thoughts are limited to an animal representational system. To offset a possible ambiguity in the notion of thought, what I am proposing is not to be confused with having or expressing thoughts by talking to others or to oneself either loudly or silently, and it is not to be confused with the idea of thinking as in imagining or dreaming that one is talking about the passing show. In these cases it seems to me one is talking and using language, and hence the thinking is conceptual. I propose that when there is no talk of any sort under any guise, then one is in a non-conceptual animal representation system frame of mind. It may also be the case that all our unconscious thoughts are of this nature as well. I have two reasons for introducing this hypothesis. The first is Occam's principle. If we can account for mental life by positing at most only animal representations, why introduce conceptual thoughts? The second reason stems from reflecting on the difficulty (examined a little later) which Sellars' account has for learning to introspect conceptual thoughts from a perspective of Methodological Behaviorism.

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[9] Patricia Churchland, "Language, Thought, and Information Processing." Nous 14 (1980): 147-170. She cites Paul Churchland's discussion in his Scientific Realism and the Plasticity of Mind (Cambridge: Cambridge University Press, 1979), where he calls the language-thought isomorphism "the Ideal Sentential Automaton Approach."

Sellars' own position is a middle one. The posited states are called thoughts and they are claimed to be analogous to sentences of a public language. However Sellars is cautious here. The analogy is strong in the case of adult. mature speakers of a public language and weakens as we descend down the chain of living creatures from language learners to brutes. The dividing line between human beings and other creatures, as was discussed in the previous chapter, is in the possession of a (broadly understood) logical vocabulary by the former and its absence in the latter.

Turning to the problem of ontological commitment to propositional attitudes (iv), this is the problem of determining whether folk psychology has an ontologically irreducible reality or not, and why. An excellent schematism of where the major philosophers stand on this issue is provided by Jerry Fodor article "Fodor's Guide to Mental Representation: The Intelligent Auntie's Vade-Mecum."[10] He divides philosophers into two major divisions: in one division are the realists about propositional attitudes; in the other are the anti-realists. The anti-realists are then subdivided as to whether they are instrumentalists or not about the attitudes. Non-instrumentalists are further subdivided into those that are functionalists or not about the attitudes.

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[10] Jerry Fodor "Fodor's Guide to Mental Representation: The Intelligent Auntie's Vade-Mecum," Mind 94 (1985): 76-100.

Turning to the realist side of this division, the subdivision is into functionalists and non-functionalists. The functionalists are subdivided on the basis of whether they take the propositional attitudes to be monadic or relational. Each of these branches is then further subdivided according to whether or not the propositional attitudes are given a non-denotational semantical functional role (FR) or not.

Here is Fodor's outline with the names of major philosophers appended to the position Fodor ascribes to them.

I. propositional attitudes
  A. realist
    1. functionalists
      a. attitudes are monadic
        (1) accepts FR semantics
          (Loar, Burge?, Stalnaker?)
        (2) rejects FR semantics
      b. attitudes are relational
        (1) accepts FR semantics
          (Harman, Block, Sellars, McGinn, Lycan)
        (2) rejects FR semantics
          (Fodor)
    2. non-functionalists
      (Searle, Dreyfus, Haugeland)
  B. anti-realist
    1. instrumentalists
      (Dennett)
    2. non-instrumentalists
      a. functionalists
        (Stitch)
      b. non-functionalists

(Churchlands)

I find this classification very valuable for orienting oneself in the literature on propositional attitudes. And, for all I know, Fodor's placements of most philosophers may be accurate. Here, however, I will focus on Fodor's placement of Sellars. According to this classification, Fodor claims that Sellars' stance on propositional attitudes is the following. He is a Realist, Functionalist, Relationalist, and an FR Semanticist.

I disagree. On my understanding, Sellars is an Anti-Realist, Functionalist, Non-Relationalist, and an FR Semanticist.

Sellars in an Anti-Realist because he recognizes the existence of sentence tokens only. Talk of propositions is a way of referring to sentence token roles or functions in the linguistic economy.[11]

As to the logical form of propositional attitudes, Sellars adopts an adverbial reconstruction. Let me explain. Suppose we have the sentence 'Fodor believes that Sellars has a relational analysis of propositional attitudes'. We can distinguish the person 'S', the psychological verb 'V' (e.g., 'believes that'), and the propositional construction 'p'. A relational reconstruction would have it that 'believes that' is a relational verb relating the person to the proposition, i. e., S-V-p, which has the form 'xRy'. Sellars does not accept this analysis. Rather than being a relation, believing is a state of a person, and the proposition is an adverbial specification of this state; so that the correct logical reconstruction is generically 'SVs' and specifically 'SV(p)s', which is to say that S is Ving in the p manner, or 'SVs-p-ly'.[12]

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[11] In this regard, Sellars' view is similar to Quine's. They both refuse to recognize meanings (and intensional objects, generally) as anything other than functional roles.

## 2 II. HOW IS INTROSPECTION POSSIBLE?

Sellars' intent in speculating about cognitive psychology is to provide an account of how it is logically and empirically possible to have the concepts of thoughts and sensations as inner episodes (to which we have a privileged access) on the basis of what Sellars calls Methodological Behaviorism.

This formulation to be understood requires a knowledge of two contrasting theses. The first contrast is that between behaviorism as restricting itself to the domain of publicly verifiable phenomena; in which case it contrasts with an introspective approach which purports to report about private phenomena. The second contrast is between a an interpretation of theoretical terms which is reductive and an interpretation which is non-reductive.

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[12] For a fuller discussion of Sellars' non-relational approach to propositional attitudes, see his "Metaphysics and the Concept of a Person," in The Logical Way of Doing Things, ed. Karl Lambert (New Haven: Yale University Press, 1969), 234-237; also Laurence Goldstein, "The Adverbial Theory of Conceptual Thought," The Monist 65 (1982): 379-392.

Take the behaviorism of B. F. Skinner. As far as I understand him, his behaviorism is programmatic in the sense that he wants to see to what extent psychology can be done by considering only public phenomena and those theoretical states which are entirely definable in terms of public phenomena. Now whether in fact his own writings are faithful to such a program is another question; specifically: Does Skinner use only such variables which are reducible to things which are publicly ascertainable? It seems to me that he does not. And some semblance of verisimilitude enjoyed by Skinner's analysis is due in part to his utilization of the very terms he wants abjured.[13]

As to the status of private phenomena, Skinner is simply silent on their status while doing psychology. When he does make reflective comments on private phenomena he seems to be an epiphenomenalist.[14]

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[13] For an elaboration of this point, I refer the reader to Noam Chomsky, "Review of Skinner's Verbal Behavior," in The Structure of Language, ed. J. Fodor and J. Katz (Englewood Cliffs: Prentice-Hall, 1964).

[14] Skinner talks about private phenomena as "collateral products or effects", and collateral effects apparently have no causal or explanatory efficacy, as is suggested by the following passage: "But this does not mean that his feelings are causally effective; his answer reports a collateral effect." B. F. Skinner, About Behaviorism (Alfred A. Knopf, 1974; Vintage Books, 1976), 53.

To understand the program of behaviorism requires an understanding of the alternative eschewed. This is the alternative of methodological solipsism[15] (it could also be called 'radical introspectionism', 'Cartesianism', or 'Mentalism'). Such a view presupposes that we have access to the media of private languages by which to express whatever is known through (private) perception and introspection.

By contrast, behaviorism is a position which assumes the methodological and epistemic priority of a learned public language.

Assuming that these two programs are viable alternatives, the problems that face these programs are reciprocal. For the methodological solipsist the problem is to explain the possibility of knowing an external, public world; for the methodological behaviorist the problem is to explain how private introspective knowledge is possible.

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[15] I am borrowing the phrase from Jerry Fodor's article title: "Methodological solipsism considered as a research strategy in cognitive psychology," The Behavioral and Brain Sciences 3 (1980): 63-109. Fodor in turn says that he borrows the phrase from Hilary Putnam's essay "The Meaning of Meaning," in Language, Mind and Knowledge, Minnesota Studies in the Philosophy of Science, ed. K. Gunderson, vol. 7 (University of Minnesota Press, 1975). However, the original source is no doubt R. Carnap's Der Logische Aufbau der Welt in which the phrases "autopsychological basis" and "methodological solipsism" are used. See R. Carnap, The Logical Structure of the World and Pseudoproblems in Philosophy, trans. Rolf A. George (Berkeley and Los Angeles, Cal.: University of California Press, 1969), 103. A critical discussion of the Aufbau is found in Nelson Goodman, The Structure of Appearance, 2nd ed. (The Bobbs-Merrill Company, Inc., 1966).

In giving his behavioristic account of how introspective knowledge is possible, Sellars adopts a genetic approach similar to the classical contract theories in politics.[16] He posits a mythical model in which it is shown by a thought experiment how it is possible to go sequentially from a public language which has no reports of private episodes to a language which does. The 'state of nature' in this myth is posited to be a community of Ryleans whose descriptive language is about publicly observable things and properties. With the resources of the Rylean language (i.e., Behaviorese or Verbal Behaviorism--it could also be described as Carnap's physicalistic thing-language), Sellars tries to introduce a theoretical language of private thoughts and sensations.

From the perspective I have given, Sellars prefers one kind of program over another, and it may seem that it is also possible to give an alternative account of public knowledge on the basis of introspective knowledge. Sellars thinks that this alternative program begs the question. His objection is that any conceptual ordering of experiences presupposes the possession of concepts. And the possession of concepts--as has been argued in the previous chapter--requires a conventional language. But presumably any account on the basis of introspective knowledge is an account of conceptual knowledge, and such an account begs the question by presupposing the very thing it is to explain, namely, the possession of conceptual knowledge. To put it otherwise, methodological solipsism must assume that there is a private language which is used to explain the existence of a public language. Such a view, for example, is attributed to St. Augustine by Wittgenstein:

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[16] The formal structure of classical contract theories is composed of a state of affairs and a posited generating mechanism for it. This approach has its roots in the Aristotelian method of "synthesis" as found in his Posterior Analytics. For the historical connection see John H. Randall, "The Development of Scientific Method in the School of Padua," in The School of Padua and the Emergence of Modern Science, in Renaissance Essays, ed. Paul O. Kristeller and Philip P. Wiener (New York: Harper Torchbooks, 1968).

> Augustine describes the learning of human languages as if the child came into a strange country and did not understand the language of the country; that is, as if it already had a language, only not this one. Or again, as if the child could already think, only not yet speak. And 'think' would here mean something like 'talk to itself'.[17]

J. Fodor quotes the above passage from Wittgenstein and adds: ". . . Augustine was precisely and demonstrably right . . ."[18] Fodor's thesis is that people possess an innate language of thought.

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[17] L. Wittgenstein, Philosophical Investigations, trans. G. E. M. Anscombe (New York: Macmillan Company, 1953), #32.

As formulated by Fodor, his thesis is too strong both for Sellars and me. His thesis relies on two objectionable assumptions. The first assumption is that the private language contains a logical vocabulary. The second assumption is that there is an equivalence between the predicates of any public (natural) language and the private language of thought, such that "for every predicate in the natural language it must be possible to express a coextensive predicate in the internal code [i. e., private language]."[19] This can be put as the acceptance of the formula:

> 'Py' (in L) is true iff Gx (in RS). ['L' stands for some public language and 'RS' for the innate representational system]

The first assumption that a pre-linguistic creature possesses a logical vocabulary is rejected by Sellars for reasons given in the previous chapter. The second assumption has been criticized for implying the paradoxical conclusion that a public language cannot formulate predicates not translatable to the predicates of the private language. As Patricia Churchland has pointed out, Fodor's position commits him to the thesis that theoretical predicates of a public language are reducible to the primitive predicates of the private language. To which she replies:

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[18] J. Fodor, The Language of Thought (New York: Thomas Y. Crowell Company, 1975), 64.

[19] Ibid., 85.

> . . . there is not the slightest reason to believe that theoretical predicates are reducible to elementary predicates . . . Quite the reverse; there is good reason to believe that theoretical predicates are not so reducible.[20]

It seems to me that Fodor's program can be amended to sidestep these two criticisms. First, it is possible to substitute for a private language which contains a logical vocabulary a representational system which does not. Second, Fodor's equivalence thesis can be either weakened to an implication, such that

If 'Py' (in L) is true, then Gx (in RS).

Or the original equivalence could be retained but the predicates involved could be restricted to second-order predicates, such as, for example, the relations of transitivity, symmetry, reflexivity. In either case, we can leave the relation between 'Py' and Gx unspecified, but allow for a broad relation of analogy between them. However, by withholding a logical vocabulary from the private language, we can grant that the (austere) private language is a necessary condition for a public language, but not sufficient; and therefore cannot account for the existence of a public language.

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[20] Patricia Churchland, "Fodor on Language Learning," Synthese 38 (1978), 153.

If we assume that pre-linguistic introspection occurs, then Sellars' problem could be couched as the problem of meshing this pre-linguistic awareness with publicly available concepts. So the question of conceptual introspection takes two forms, depending on whether or not an allowance is made for pre-linguistic introspection. Sellars writes in his classical "Empiricism and the Philosophy of Mind" as if the alternative of pre-linguistic awareness were not available. But this is in variance with his admission of animal representational systems in "Mental Events."[21] An alternative approach to Sellars' which is behavioristic in a broad sense is one which posits more innate factors than are usually used by behaviorists. Such a position for Sellars would be coherent; but which if not restricted, could lead to an appearance of circularity in explanation. Sellars has in mind the postulation of an innate language-like structure to account for the possibility of learning a public language. His position seems to be that if there is no better way to account for language acquisition than by positing an innate language-like structure, then this is what should be done:

> There is nothing self-contradictory about the idea of an innate language-like structure (Mentalese), and

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[21] Sellars has unfortunately not faced this apparent contradiction in his writings.

> there might just be no other way of explaining language acquisition.[22]

The question we should raise in following Sellars' behavioristic account of the possibility of introspective knowledge is: first, to find out what constitutes Methodological Behaviorism; and, second, whether Sellars' specific account is physically possible. As is suggested by the reference to innate structures, Sellars' conception of Methodological Behaviorism is quite liberal. I would agree with Quine's remark that "His [Sellars'] moderate behaviorism is exactly to my taste."[23] Nonetheless, I will argue that Sellars' peculiar strategy of accounting for language acquisition, and specifically the acquisition of introspective knowledge does not show how it is possible.

## 2 A. THREE STAGES FOR THE POSSIBILITY OF INTROSPECTION

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[22] Wilfrid Sellars, "Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 61 (1980), 5, #18. The allusion is obviously to Noam Chomsky who advocates the existence of a species specific innate "knowledge" of a universal grammar.

[23] W. V. Quine, "Sellars on Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 6 (1980), 26.

Our conceptual abilities to introspect our thoughts and sensorial states (which are included in the Manifest Image) are a problem for Sellars because of his behavioristic foundations. He must provide an account of the possibility of introspection on the basis of publicly accessible data. Sellars' approach is intended to be a reconciliation between the classical view of thoughts and sensations as inner episodes (to which we have a privileged access) and a behavioristic public foundation. To do this, he adopts an approach similar to the classical political contract theories by constructing a possible genetic account beginning with a (fictitious) Rylean community. The language of this community is based entirely on intersubjectively available data. It has the conceptual vocabulary for talking about physical objects and persons. But it lacks the vocabulary for introspective reports. Sellars believes that the resources available in Behaviorese are sufficient to account for the possibility of introspection. To provide an account of how it is logically and empirically possible to have the concepts of thoughts and sensations as inner episodes (to which we have a privileged access) on the grounds of Methodological Behaviorism, Sellars conducts a thought experiment to show that it is possible to go sequentially from a public language which has no reports of private episodes to a language which does. Sellars' behavioristic account has, or should have, three stages. In the first stage he posits a community which speaks Behaviorese: the Ryleans. However, this first stage should also have an account of how Behaviorese is possible. But Sellars does not present such an account explicitly; it has to be reconstructed from his writings. In the second stage he introduces semantical discourse from the resources of Behaviorese; while in the third stage he gives an account of the language of introspection of thoughts and sensations using the theoretical resources of Methodological Behaviorism.

I will describe and criticize these stages. Sellars, unfortunately does not argue for the first stage, at least not explicitly. What is needed for the first stage is an account of how people could have learned a Behaviorese language, and whether such a language is possible. At best we get a thesis about this: language is a product of social evolution through natural selection. The mechanism by which this takes place is evidently some form of conditioning. But this is not clearly explained.[24] Sellars' arguments are concentrated on the defense of his second and third stages.

The conclusion I reach about the first stage is that Sellars is implicitly committed to the ontological priority not only of rs-thoughts in animals and people, which has been granted, but also possibly of ur-concepts in pre-linguistic people and possibly in animals. As to the second and third stages, my conclusion is that although Methodological Behaviorism is adequate for these stages, Sellars has failed to show how Methodological Behaviorism gives an account of introspective language, and that another explanation along behavioristic lines is available.

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[24] It strikes me that Quine's book Word and Object (Cambridge, Mass.: MIT Press, 1960) is to a large extent such an account. And I believe there is much in this account with which Sellars could agree.

However, there is one aspect of Sellars' discussion which is insightful, namely the claim that thoughts are to be understood by analogy to overt speech.[25] But that insight is compatible with alternative psychological accounts.

## ~~4~~3 1. 1ST STAGE: BEHAVIORESE

### 4 a. PRINCIPLES OF BEHAVIORISM

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[25] This "insight" is attributed to Sellars by Patricia Churchland: "A prominent contemporary inspiration for sentential theories of the brain-mind is Wilfrid Sellars." "Language, Thought, and Information Processing," Nous 14 (1980), 151. However, her considered judgment is that this view is mistaken. Her main target of rebuke is Fodor's theory which posits an innate private language of thoughts. This, however, is not Sellars' view. He only suggests that the thoughts of language users and of animals be understood by analogy to sentence use. What is relevant here is that Sellars does not spell out completely the nature of this analogy--leaving the suggestion to act as a heuristic device. As such, even the abstemious nature of information processing acceptable to Patricia Churchland is compatible with Sellars' view.

The first task is to get clear about what Behaviorism claims. Ausonio Marras has listed the following principles of a behavioristic methodology, which probably reflects B. F. Skinner's approach:

> (i) The basic laws of conditioning are the laws of reinforcement (law of effect) and/or the classical laws of association (contiguity and frequency, stimulus generalization and stimulus discrimination, etc.)
> (ii) S-R connections are essentially functional, i.e., they have the form R=F(S), where this is a 'gross function' usually derived from elementary functions relating stimuli and responses to other 'environmental' variables (state of deprivation, histories of reinforcement, etc.)
> (iii) An S-R connection is acquired only if the probability of a response $R_j$ given $S_i$ (under conditions C) is greater than .5.
> (iv) $S_i$ and $R_j$ are physical states describable in the observational (molar) language of the experimenter.
> (v) Non-observationally definable states of the organism may not be postulated in a functional analysis of behavior.[26]

That a language can be understood and explained on behavioristic assumptions is, of course, vehemently denied by Noam Chomsky who, in his review of Skinner's Verbal Behavior presented a series of plausible counter-arguments. His main objection was that Skinner had rejected theory construction as a program, and, furthermore, had adopted a crude version of the verifiability theory of empirical meaning, such that all legitimate theoretical terms had to be definitionally reduced to empirical terms.

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[26] Ausonio Marras, "Rules, Meaning and Behavior: Reflections on Sellars' Philosophy of Language," in The Philosophy of Wilfrid Sellars: Queries and Extensions, ed. Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978), 177.

Chomsky believes that the grammar of a language is too complex a phenomena to be understood without a theory, and, in addition, rejects Skinner's theory of empirical meaning. So, inasmuch as Skinner's behaviorism rests on a methodological rejection of theory construction, on the one hand, and a reductionist theory of empirical meaning, on the other, his behavioristic foundations for language are inadequate. Specifically, an explanation of linguistic abilities, according to Chomsky, must include a theoretical postulation in the language user of an innate knowledge of a universal grammar--a knowledge which is not derivable from any finite learning history. On his theory, particular grammars of the natural languages simply utilize some of the resources of the universal grammar. It's as if the mind had a propensity for learning only a range of possible grammars.[27] Chomsky's approach is thus in two respects incompatible with Skinner's version of behaviorism about language. It uses theory construction, and it does not reduce theoretical terms to observational terms.

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[27] There is unclarity as to what Chomsky means by a 'universal grammar'. A universal grammar is allegedly composed of rules. But there is an ambiguity in this. Are the rules operative in the sense that they are conformed to like a falling object conforms to the law of gravity, or are rules like the premises of an argument which are, so to say, taken stock off, or are rules like the rules of inference, e.g., the rule of modus ponens, or are rules embedded structures like the hard wiring of a computer?

A related problem concerns the generality of these rules. Is a universal grammar equivalent to the syntactical structures which are necessary for any (empirical) language? In that case the universal grammar will consist of at least rules of formation so as to allow subject-predicate and relational sentences, formal and material rules of inference, and sentences expressing practical intentions as conceived by Sellars. If that is the case, then Chomsky's position is incompatible with Sellars'.

## 5 b. SOPHISTICATED BEHAVIORISM

However, as many empiricists point out, a behavioristic program need not shy from theory construction, nor need it be shackled to a reduction thesis about the meaning of theoretical terms. For example, Marras himself objects to the behavioristic program as sketched by postulates (i)-(v). He writes that "Postulate (v), for example, must be rejected in favor of a more liberal postulate which allows for the introduction of theoretical constructs . . . ."[28]

Sellars' view of behaviorism is another such sophisticated version which does not have these objectionable tenets. He writes:

> Today it is obvious at a glance that in a sense the Behaviorist methodology was unnecessarily restrictive. . . . Why not introduce hypothetical constructs into Behavioristics (compare the postulational concepts of physical theory) instead of restricting yourself to intervening variables (the mark of which-

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Sellars would take that these structures are not innate, but learned.

[28] Ausonio Marras, "Rules, Meaning and Behavior: Reflections on Sellars' Philosophy of Language," in The Philosophy of Wilfrid Sellars: Queries and Extensions, ed. Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978), 179.

> -though the terminology was misleading--is definability in terms of observables)?[29]

In fact, Sellars introduces another methodological allowance in his version of behaviorism: he allows for a conditioned response (i. e., associative) connection to take place even between theoretical states. In a spirit of criticism, he writes that in the "Skinnerian tradition"

> conditioned responses are talked about in such a way that the overt is conditioned to the overt. This is bound up with the reluctance of many psychologists to speak in terms of establishing connections between postulated central processes; and, in general, with an anti-theoretical bias.[30]

Thus, taking Chomsky's criticism of Skinner's behaviorism seriously, it is possible to introduce into behaviorism exactly those elements Chomsky argues are missing: theory construction, irreducibility of theoretical terms, and even connections between theoretical entities. So there is a viable form of behaviorism, defended by Sellars, which is not taken into account by Chomsky.

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[29] W. Sellars, "Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 61 (1980), 6.

I should point out that Fred Wilson incorrectly interpreted Sellars' behaviorism as requiring that all theoretical terms (including mentalistic terms) be explicitly definable by physicalistic terms. See his "Marras on Sellars on Thought and Language," Philosophical Studies 28 (1975): 91-102. This error on Wilson's part was the subject of Ausonio Marras' reply to Wilson. See his "Sellars' Behaviourism: A Reply to Fred Wilson," Philosophical Studies 30 (1976): 413-418.

[30] Wilfrid Sellars to Hector-Neri Castañeda, "Correspondence between Hector Castañeda and Wilfrid Sellars on Philosophy of Mind" (unpublished, 1961), 12.

It would seem that a language, which for Sellars is basically pattern governed behavior, could be learned through stimulus-response (S-R) conditioning:

> To learn pattern governed behavior is to become conditioned to arrange perceptible elements into patterns and to form these, in turn, into more complex patterns and sequences of patterns. Presumably, such learning is capable of explanation in S-R reinforcement terms, the organism coming to respond to patterns as wholes through being (among other things) rewarded when it completes gappy instances of these patterns. Pattern governed behavior of the kind we should call "linguistic" involves 'positions' and 'moves' of the sort that would be specified by 'formation' and 'transformation' rules in its metagame if it were rule obeying behavior.[31]

Since this passage may be a rare clue to what Sellars has in mind, let's take note of what Sellars is proposing here. First, Sellars has in mind Skinner's "operant conditioning" rather than classical Pavlovian conditioning. The relevant distinction is that in the latter the stimuli to behavior may not always be known; what is known is that it is possible to reinforce emitted behavior, including emitted verbal behavior.[32] And this is the kind of conditioning that suffices. Second, in learning sentences, the learner learns how to complete 'gappy sentences' such as '____ danced with _____ . Such a suggestion reminds me of

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[31] Wilfrid Sellars, "Some Reflections on Language Games," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 327.

[32] How such emitted vocal behavior comes about is a secondary question. Some of it is obviously spontaneous babbling while some is the result of imitation.

Frege's characterization of a function or predicate as "unsaturated,"[33] and Ryle's notion of category as determined by "sentence frames."[34]

Skinner in his book Verbal Behavior[35] made a similar claim that sentences are learned through the learning of how to complete sentence frames. And if we focus on this thesis in Skinner which is shared by Sellars (and Quine), what objections does Chomsky have to this approach? In his review of Skinner's book, Chomsky comes near to considering this approach in Skinner when he comments on what he takes to be a common strategy: "The idea that sentences consist of lexical items placed in a grammatical frame is of course a traditional one, within both philosophy and linguistics."[36] I said "comes near" because judging by Chomsky's example, he does not have gappy sentences in mind, but rather grammatical structures. He compares the two sentences:

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[33] In Frege's semantics, the verbal expressions or sings stand for either objects or functions. These functions are then subdivided as concepts if the functions take one argument or as relations if the functions take two or more arguments. It seems that the term 'predicate' stands for functions, and then either predicates or functions can be said to be 'unsaturated' in the sense of gappy sentences or propositions, respectively, which need filling. See G. Frege, "On Concept and Object," in Translations from the Philosophical Writings of Gottlob Frege, ed. Peter Geach and Max Black (Oxford: Basil Blackwell, 1966), 54-55.

[34] Gilbert Ryle, "Categories," in Logic and Language (First and Second Series), ed. Antony Flew (New York: Anchor Books, 1965).

[35] B. F. Skinner, Verbal Behavior (New York: Appleton-Century-Crofts, Inc., 1957).

(A) Furiously sleep ideas green colorless.

(B) Friendly young dogs seem harmless.

claiming that they have the "same" frames. And that (B) and (A) (read from back to front) are sentences of English. I am puzzled by what Chomsky has in mind in calling (A) and (B) the same frames. As far as I can discern, they both have the frame

(C) ______ly _____ ____s _____ ______less

If this is what Chomsky has in mind, then I can readily agree with his comment that

> It is evident that more is involved in sentence structure than insertion of lexical items in grammatical frames; no approach to language that fails to take these deeper processes into account can possible achieve much success in accounting for actual linguistic behavior.[37]

It seems then that Chomsky ignores the approach to learning sentences through gappy sentences of the forms:

________ young dogs seem harmless.

______ly young dogs seem harmless.

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[36] Noam Chomsky, "Review of Skinner's Verbal Behavior," in The Structure of Language, ed. J. Fodor and J. Katz (Englewood Cliffs: Prentice-Hall, 1964), 574.

[37] Ibid., 574.

Friendly _____ dogs seem harmless.
Friendly young _____ seem harmless.
Friendly young ____s seem harmless.
Friendly young dogs ______ harmless.
Friendly young dogs seem _________.
Friendly young dogs seem ______less.

It seems to me that a considerable amount of grammatical and semantical knowledge could be acquired through inductive generalization (the sort that is presupposed by behaviorist learning theory) from piecemeal learning of how to fill these kinds of sentence frames.

But once behaviorism is expanded in the manner described to include theory use and principles of induction, someone may object that behaviorism is no longer distinguishable from the rationalism Chomsky wants to defend. The empiricist-rationalist distinction becomes blurred.

Let us pause for a moment to reflect on the requirements for a behavioristic theory of language. A sophisticated behaviorism, such as Sellars', will not shy from theory construction, but it will prescribe standards for theory construction. Specifically, Chomsky introduces a theory to the effect that humans have an innate knowledge of universal grammar which manifests itself in the course of maturation and of learning a conventional language. Likewise a behavioristic theory may also allow for a stage of maturation, not because maturation elicits as innate knowledge of grammar, but because on maturation the brain reaches a particular stage of development where learning a language is possible. And what is the difference in saying that the brain is now in a state of readiness (as the behaviorist will say) and saying that the brain now has the universal grammar? The difference between a behavioristic and an innatist approach such as Chomsky's is whether anything has to be postulated for brain endowment which cannot be accounted for by the postulation of mechanisms in the brain that allow for conditioned learning, especially through sentence frames.

## 5 c. METHODOLOGICAL BEHAVIORISM

Sellars assumes a version of behaviorism in the psychology of language learning. Behaviorism, as understood by Sellars, is the thesis that "all concepts [in psychology] must be introduced in terms of a basic vocabulary pertaining to overt behaviour."[38] All forms of behaviorism, by this characterization, initially assume a "a behavioristic language restricted to the non-theoretical vocabulary of a behavioristic psychology."[39] Sellars calls this common language of behaviorism the Rylean language (or Behaviorese).

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[38] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality, 185.

Since Behaviorese is intended to be an empirical language, it has to satisfy the necessary and sufficient conditions of being an empirical language generally. Here we can incorporate all of Sellars' early writings on the a priori conditions for the possibility of an empirical language.[40] Such a language, as has already been discussed, must have language entry, intra-language, language departure transitions, and auxiliary positions. And Behaviorese satisfies these requirements.

Of course Behaviorese must include "the elementary logical terms for conjunction, disjunction, negation, and quantification, but especially of the subjunctive conditional."[41] I believe that Sellars means to include other (broadly) logical terms as well: terms for identity, class membership, and various modal terms, including those of deontic logic.

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[39] Ibid., 186.

[40] Wilfrid Sellars, "Pure Pragmatics and Epistemology," Philosophy of Science 12 (1947): 181-202; idem, "Epistemology and the New Way of Words," The Journal of Philosophy 44 (1947): 645-60; idem, "Realism and the New Way of Words," Philosophy and Phenomenological Research 8 (1947-1948): 601-34; idem, "Concepts as Involving Laws and Inconceivable without Them," Philosophy of Science 15 (1948): 289-315.

[41] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality, 178.

The peculiarity of Behaviorese is in how it satisfies the language entry requirement: ". . . the fundamental descriptive vocabulary speaks of public properties of public objects located in Space and enduring through Time."[42] The alternative being rejected by Behaviorese is an initial descriptive vocabulary about private objects and properties. Behaviorese resources allow the expression of empirical generalizations and counterfactual conditionals, which in turn allows talk about the natures of physical objects and persons, including dispositions and short-term propensities of persons.

And as becomes clear from Sellars' (unpublished) letter to Marras, Behaviorese may include a theoretical language about inanimate things: "pre-Joneseans were able to give theoretical explanations of purely physical phenomena."[43] And though it is clear that Behaviorese must initially exclude an introspective awareness of thoughts and sensations, it is not clear to what extent Behaviorese is committed to excluding other theoretical entities. We are only told that

> the philosophical situation it [the Rylean language] is designed to clarify is one in which we are not

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[42] Ibid., 178.

[43] Wilfrid Sellars to Ausonio Marras, 4.

> puzzled by how people acquire a language for referring to public properties of public objects, but are puzzled indeed about how we learn to speak of inner episodes and immediate experiences.[44]

This is the case because the Manifest Image is a language which includes introspection, and the problem is to give an account of the Manifest Image using the resources of the Rylean language (Behavioresе).

Sellars opposes the thesis of Philosophical (Logical or Analytical) Behaviorism--the view that concepts about inner episodes "must be built by explicit definition--in the broad sense--from a basic vocabulary pertaining to overt behaviour."[45] By contrast, Scientific or Methodological Behaviorism--the view which Sellars favors--holds that "some behavioristic concepts are to be introduced as theoretical concepts."[46] Using the terminology of MacCorquodale and Meehl,[47] Analytic Behaviorists restrict themselves to the introduction of "intervening variables", while Sellars also introduces "hypothetical constructs" (or what in quantum theory speculation are referred to as "hidden variables"). From a semantical point of view, intervening variables are terms which can be translated into a non-theoretical Behaviorese language, while hypothetical constructs are terms which cannot. Specifically, Sellars' thesis is that introspective language of thoughts and sensations can be introduced as "hypothetical constructs" by analogy to the introduction of theoretical entities in the natural sciences.

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[44] Sellars, "Philosophy of Mind," 178-179.

[45] Ibid., 184.

[46] Ibid., 185.

[47] Kenneth MacCorquodale and Paul Meehl, "On a Distinction Between Hypothetical Constructs and Intervening Variables," Psychological Review 55 (1948): 95-107.

Opposed to both these types of behaviorists are the views of psychological Cognitivists who are not only puzzled by whether and how we learn to speak of inner episodes and immediate experiences, but are also puzzled by how people acquire a language for referring to public properties of public objects in the first place. Cognitivism, in this context, is the view which tries to explain the learning of a Rylean language (Behaviorese) by introducing psychological "hypothetical constructs" in contrast to the view which tries to explain the learning of a Rylean language without this recourse. The latter is Sellars' position. The former position was held by, among others, Descartes, and is currently held by, among others, Jerry Fodor, Hector-Neri Castañeda, and Noam Chomsky, who contend that the learning of a public language requires innate linguistic endowments. Fodor speaks about an innate (private) language of thought, Castañeda about a private language (Privatish), while Chomsky of an innate competence for generating a grammar.

### d. THE INNATE IN BEHAVIORISM

Before we can make a judgment about the adequacy of behavioristic resources, we should be able to list them. To say that behaviorism admits only learning from public experience is misleading. After all behaviorists presuppose all sorts of innate mechanisms in an organism. As Quine, who calls himself a behaviorist, put it: "the behaviorist is knowingly and cheerfully up to his neck in innate mechanisms of learning-readiness."[48] He gives as an example of an innate mechanism the ability to distinguish between the qualities of stimuli. In fact, for Quine, the very possibility of learning requires an innate ability to distinguish similarities and differences of form as well as content, and the ability to generalize these through analogies. When Quine talks about the learning of a language he appeals to such abilities.

Since Sellars' view is based on behavioristic learning theory, it must presuppose a similar conception of the human organism and its innate and developmental capacities. I have in mind such things as innate needs, innate reflexes, including various tendencies to respond, avoidance behavior, orientation reflex, instincts, imprinting, and capacity to learn. Behaviorism must also presuppose such innate capacities as 'stimulus discrimination' and 'stimulus generalization', 'spread of effect', 'differentiation of response' (which Quine acknowledges to be innate); principles of stimulus-response association: Thorndike's law of effect, various principles of classical and Skinner's operant conditioning. Judging by his comments on RS organisms, I don't think Sellars needs to or would want to dispute any of these. Since he grants to animals the capacities to represent (map), and even meta-represent their environment, such abilities, it seems to me, require considerable innate mechanisms. This behavioristic apparatus, or something like it, must be presupposed by Sellars, as it is by Quine. But, as far as I know, Sellars does not systematically discuss the foundations of behavioristic theory, though he does make some remarks about it.

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[48] W.V.O. Quine, "Linguistics and Philosophy," reprinted in Innate Ideas, ed. Stephen P. Stitch (Berkeley, California: University of California Press, 1975), 200.

Sellars seems to agree on the need to posit innate factors: "People obviously have innate psychological abilities."[49] But the question is: which ones? We know that he grants to people innate representational systems: "Undoubtedly a primitive form of representational system is also an innate endowment of human beings."[50] Judging by the fact that he attributes to animals the capacities to represent (map), and even meta-represent their environment; such abilities, it seems to me, are also innate human endowments. But, as far as I know, he does not discuss in detail behavioristic theory, though he does discuss the logical methodology of behaviorism. His most significant observation is to allow the introduction of hypothetical constructs in psychology. Such an admission allows Sellars to say: "There is nothing self-contradictory about the idea of an innate language-like structure (Mentalese), and there might just be no other way of explaining language acquisition."[51]

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[49] Wilfrid Sellars, "Behaviorism, Language and Meaning," Pacific Philosophical Quarterly 61 (1980), 14, #107.

As a Methodological Behaviorist, he should apply the principles of Methodological Behaviorism to the learning of Behaviorese itself. This is to say that he should utilize theoretical posits for the learning of Behaviorese. But all he mentions are principles of conditioning--both classical and operant. Theoretically he allows for an innate grammar of the sort we find in Chomsky as a possible theory, but resists appealing to such a theory in practice. In fact, I suspect that Sellars would side with Quine's criticisms of Chomsky, and even agree with a great deal of Quine's explanations of language learning in his Word and Object.[52]

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[50] Ibid., 14, #106.

[51] Ibid., 5, #18.

Instead of the detailed account of language learning found in Quine, we get from Sellars a transcendental reflection on the necessary conditions for empirical knowledge. These are various psychological associations between non-cognitive experiences and language, between different language forms, and between language and actions. He passes over the problem of the more detailed structures of such associations, and the problem of how such associations are possible. It is at this point that cognitive psychology makes it's entrance. Chomsky, for example, is bothered by the fact that

> Grammar and common sense are acquired by virtually everyone, effortlessly, rapidly, in a uniform manner, merely by living in a community under minimal conditions of interaction, exposure, and care . . . Knowledge of physics, on the other hand, is acquired selectively and often painfully, through generations of labor and careful experiment, with the intervention of individual genius and generally through careful instruction.[53]

One puzzle is how it is possible for a child to learn a language so quickly. To account for this he postulates an innate knowledge of a 'universal grammar'.[54] In one sense of this phrase, it is equivalent to the necessary conditions of any language.[55] These we can grant to exist analytically wherever there is a language.

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[52] W. V. O. Quine, Word and Object (Cambridge, Mass.: MIT Press, 1960).

[53] Noam Chomsky, Reflections on Language (New York: Random House, 1975), 144.

Chomsky is assuming that a knowledge of language--specifically grammar--is underdetermined by the evidence. Knowledge of a language becomes analogous to a scientific hypothesis. However, scientific hypotheses can be either empirical generalizations or theoretical postulates. Is the acquisition of language like the former or the latter? As I see the dispute between the empiricists and the rationalists, the empiricists see the situation of language learning as a matter of empirical generalization, while the rationalists see it as resembling theoretical postulation or, to use a term from Charles Peirce, abduction.

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[54] Chomsky writes: "Let us define 'universal grammar' (UG) as the system of principles, conditions, and rules that are elements or properties of all human languages not merely by accident but by necessity--of course, I mean biological, not logical, necessity. Thus UG can be taken as expressing 'the essence of human language.'" N. Chomsky, Reflections on Language (New York: Random House, 1975), 29. It is odd that Chomsky uses the word 'grammar' in this context because he explicitly says that "'universal grammar' is not one of the set of grammars made available by linguistic theory . . . Rather, it is a schematism that determines the form and character of grammars and the principles by which grammars operate." Ibid, 219. Chomsky would have done better to drop the phrase 'universal grammar' in favor of the phrase 'universal schematism'. Put thus, there are no innate grammars (of linguistic theory) for Chomsky.

[55] It seems to me that this is no different than the search for the transcendental conditions for the possibility of any language, and that Sellars has supplied the general schema for this in his observation-inference-volition requirement.

The rationalist-empiricist controversy can be put as a controversy about the cognitive status of abductions. I take it that a rationalist claims that abduction cannot be explained on empiricist principles; the empiricist denies this. .

But no matter which way we look at hypothesis formation, there is the difficulty that a hypothesis is formulated in a language. Therefore if learning a language is a matter of hypothesis formation, then in learning language-1 we must assume the existence of metalanguage-2 in which the hypotheses about language-1 are formulated. Obviously this view will result in either an infinite regress, a vicious circle, or an innate language.

The solution is either to embrace one of these consequences (as does Jerry Fodor who follows the tradition of positing an innate "natural" language of thought as, for example, in St. Augustine and William Ockham) or reject the assumption of a literal understanding of "hypothesis" formation. The alternative is to take "hypothesis" formation as a figurative way of talking about cognitive structures. But these cognitive structures could be understood in two ways as either the generated representational systems or the structures for generating representational systems (including a conventional language). Put in these terms the issue between empiricists (behaviorists) and rationalists (cognitivists, mentalists) is the nature of this generating capacity. The question is: What are the human endowments which make the learning of a conventional language possible? To answer this question we must focus on those characteristics of a human language and its acquisition which are problematic. Chomsky cites two problematic features. The first is the creative aspect of language; the second, the effortless ease of acquiring grammar and common sense. Chomsky's solution is to posit an innate endowment for generating particular grammars. The generating capacity is (infelicitously) called a "universal grammar."

## 5 e. ORDER OF BEING AND ORDER OF KNOWING

Sellars sometimes makes use of the Aristotelian distinction between what exists and what is known to us. And he applies this distinction to the relation of thoughts to knowledge. He states that thoughts exist without being known; knowledge of them requires the conceptual apparatus of a language. If this is all that Sellars claims, then there would be no essential controversy with innatism.

This formulation, however, blurs the distinction between conceptual thoughts and rs-thoughts. It is clear that Sellars would grant human beings rs-thoughts which are independent of language, but it is not equally clear that he would grant conceptual thoughts independently of language. His claim that thoughts are ontologically prior to language may mean no more than that after a language is learned, a person acquires conceptual thoughts, and these, as internalized, are prior in the order of being from then on. On this interpretation we have to assume that the Ryleans in learning a public language at the same time (concomitantly) are learning to think conceptually. From this it would follow that there is no conceptual thinking prior to the learning of a language. The distinction between a prior ontological being of thoughts is at best the claim that thoughts (qua neural patterns) are causally (though not genetically) prior to overt utterings, and that such neural patterns embody the dispositions to overt utterings. What Sellars would not be claiming, on this interpretation, is that in the order of being conceptual thoughts exist prior to the acquisition of a public language.

From this interpretation many of Sellars' claims follow. His claim that "the individual as a conceptual thinker is essentially a member of a group,"[56] and that

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[56] Wilfrid Sellars, "Philosophy and the Scientific Image of Man," in Science, Perception, and Reality, 17.

"It is no accident that one learns to think in the very process of learning to speak."[57]

This interpretation may also shed light on the Sellars-Chisholm correspondence. Chisholm wrote to Sellars that:

> Thoughts would be intentional even if there were no linguistic entities. (This is a sentence about psychology. I concede that if we had no language, our thoughts would be considerably more crude than they are.)[58]

Chisholm may have meant by this no more than that rs--thoughts exist independently of language learning. That this is what Chisholm did mean, or was taken to mean by Sellars, is suggested by Sellars' letter to David Rosenthal several years later, where he wrote:

> My guess is that Chisholm so uses 'psychological' that it includes items which I would deny to be intentional (e.g., sense impressions, tickles, pains, etc.)--cf. my discussion of the pseudo-intentionality of sense impressions in EPM ["Empiricism and the Philosophy of Mind"]. Unless I am very much mistaken, he thinks that they have intentionality, or confuses a broader sense of 'intentionality' in which a non-conceptual items can have intentionality, with a narrower sense in which they cannot.[59]

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[57] Ibid., 32.

[58] Roderick Chisholm, "Intentionality and the Mental (Sellars-Chisholm Correspondence)," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, vol. 2 (Minneapolis: University of Minnesota Press, 1958), 533.

[59] Wilfrid Sellars to David Rosenthal, "The Rosenthal-Sellars Correspondence on Intentionality," in Intentionality, Mind, and Language, ed. Ausonio Marras (Chicago: University of Illinois Press, 1972), 478.

It is not entirely clear what Sellars is alluding to by 'intentionality in the broader sense'. My best guess is that he has in mind rs-concepts. But despite this clarification, if we introduce a distinction between conceptual and non-conceptual representations, it is still not entirely clear to me what kind of thinking Sellars in fact grants to pre-linguistic people and animals.

This finishes my examination of the first stage.

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## 2. 2nd STAGE: SEMANTICAL DISCOURSE

For the Ryleans to reach the stage where sensations and thoughts are responded to without verbal expression, several things are needed. Sellars points out that two things are needed for the Ryleans: semantics and postulational theory.

The first addition needed for the possibility of introspective reports is semantical discourse. Semantical discourse consists of using such words as 'means', 'true', 'synonym', 'denotes', 'refers'. Sellars believes that the move to a semantical language, which requires the introduction of a metalanguage, is necessary for reflectivity, self-knowledge, and, ultimately, for becoming a person.

Sellars' position is that to be truly human, i.e., to be a rational person requires metathinking. In fact, he writes: "To lose the tendency to have appropriate meta--thoughts is to cease to be rational or to lose one's mind."[60]

The addition of semantical resources enables us to describe the intentionality of thoughts:

> it is clear that semantical talk about the meaning of reference of verbal expressions has the same structure as mentalistic discourse concerning what thoughts are about.[61]

Ausonio Marras in "The Behavioristic Foundation of Sellars' Semantics" found it a problem to account for the acquisition of semantical discourse with the Rylean resources. He reasoned:

> Since the acquisition of semantical discourse by Sellars' Rylean ancestors is surely not to be viewed as a gift from the gods, but must, instead, be regarded as a natural development from _within_ the primitive Rylean language itself, we must suppose that the conceptual and methodological resources of the primitive language must have been _rich enough_ to permit this development.[62]

Marras sees a problem for Sellars because he has focused his attention on the following characterization by Sellars of the Rylean language: "as not only a _behavioristic_ language, but a behavioristic language that is restricted to the _non-theoretical_ vocabulary of a behavioristic psychology."[63] Given this restriction, Marras can only see two alternatives for this kind of logical behaviorism: either semantical terms are introduced by explicit or implicit (contextual) definitions. And since Sellars has disavowed this kind of analysis for semantical terms, Marras sees only one way out for Sellars: to introduce semantical terms as theoretical terms. But to introduce theoretical terms, the Ryleans, according to Marras, must have had that ability to begin with. So, Marras concludes that the original characterization of the Rylean language as being restricted to a non-theoretical vocabulary must be given up. This is Marras' alleged correction of Sellars on this point.

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[60] Sellars to Castañeda, 19.

[61] Sellars, "Philosophy of Mind," 180.

[62] Ausonio Marras, "The Behaviouristic Foundation of Sellars' Semantics," _Dialogue_ 16 (1977), 668.

To this, Sellars replied (in a personal letter to Marras) that

> The reference to theoretical discourse is pertinent, but not of the essence, for I could have made an explicit commitment to the idea that pre-Joneseans were able to give theoretical explanations of purely physical phenomena. Indeed, I would have done so had I been on my toes.[64]

According to Sellars, "Jones . . . was already familiar with theoretical explanation in non-mentalistic contexts."[65] So Marras' narrow reading of Sellars turns out to be a misinterpretation.

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[63] Sellars, "Philosophy of Mind," 186; quoted by Marras, "Behaviouristic Foundation," 668.

[64] Wilfrid Sellars to Ausonio Marras, Nov. 26, 1975, 4.

Still Marras' point about the logical character of semantic discourse has to be answered. Sellars' answer is that semantical sentences are not analyzable. So neither explicit nor implicit definitions are to be sought. Nor is semantical language like a theory. Semantical discourse is classificatory discourse, as Sellars explained to Marras:

> Our Ryleans are presumably able to *classify* a wide variety of things and events. They also play chess, and use sortals, like 'pawn,' the senses of which are bound up with rules. Thus, as far as *semantics* is concerned, Jones' chief invention is the introduction of what I have called 'illustrating quotes' to form sortals which classify linguistic expressions in terms of their functions in the language to which they belong.[66]

Sellars' point is that semantical discourse is simply an analogical extension of discourse that is granted to the Ryleans to begin with.

## 5 a. NATURE OF SELLARS' SEMANTICS

A major theses of Sellars' philosophy is the distinction between the order of signification (the logical order) and the natural order (the order of reality). Such a bifurcation leads to difficulties--difficulties which could be avoided by distinguishing within the order of signification between the logical order and a non-logical order--what I have been calling a Representational System. I will first formulate Sellars' position, then the difficulties, and finally my resolution of these difficulties.

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[65] Ibid., 5.

[66] Ibid., 5.

Words and artifacts in general have their feet in the logical and the natural order. For example, a hammer qua material composite of metal and wood of a particular shape is just a physical object; describable and explainable by the principles of physics, biology, metallurgy, etc.--it is in the natural order. However, this same physical object can be used as a tool. Relative to what it was designed for, and relative to what it is normally used for, it is a hammer. Still it could be used for other purposes: as a paper weight, a projectile, a miniature crow-bar, whatever. In this aspect as a role player, the hammer is in a different order--the order of means for actions.

It is similar with words. In the natural order, words are normally formed either from a combination of vocal sounds or ink-marks (inscriptions) on paper. In the logical order these vocal sounds and ink marks play a role in the syntactical-semantical-pragmatical dimension. And if we think of thoughts as analogously composed of "words", then these mentalese words too are in the logical order.

## 6 (1) QUOTING CONVENTIONS

For the sake of clarity, Sellars introduces various quoting devices to facilitate talking about (mentioning or illustrating) the occurrences of words in these various capacities. Our common practice is to mention words by using either scare-quotes or double quotes. But this practice conceals a six-fold ambiguity. There is first a distinction between word tokens and word types, and this distinction is applicable to three orders: the real order, the logical order (the order of signification), and the mentalese order (the order of thoughts).

When Sellars wants to talk about (mention) words as tokens of ink-marks in the natural order, he writes the word "cat" using either hyphens (e.g., c-a-t) or slurs (e.g., c^a^t). He uses asterisk quotes to mention words in the natural order as types of designs. The word "cat" written in either italic, long hand, Gothic, and so on, placed between asterisks refers to the types as illustrated between the asterisk quotes; thus, *cat*.[67]

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To mention words as tokens in the order of signification, he places them in scare (single) quotes (e.g., 'cat') or double quotes (e.g. "cat"). To mention words as types in the order of signification (role, function), he places them in (illustrating) dot quotes, e.g., ·cat·.[68] He explains that dot-quotation is "a mode of quotation which spans different languages, as familiar quotation spans the difference between written and spoken forms of the same language."[69] In his correspondence with Rosenthal he adds:

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[67] Wilfrid Sellars, "Abstract Entities," in Wilfrid Sellars, Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967), 49.

> to classify an utterance as a ·___· is to classify it in terms of its role in a language-life game, i.e., in terms of its place in a system of language entry transitions, language departure transitions and intra-linguistic moves.[70]

The tokens of mentalese are neurophysical states of the brain and are mentioned by single French quotes; e.g., <cat>.[71] Mentalese types are mentioned by using double French quotes; e.g., <<cat>>.[72] An alternative terminology for what seem to be mentalese types is given in the Rosenthal-Sellars correspondence. Mentalese types are here called Ockhamite items, and are mentioned by the use of diamond quotes; e.g., <>cat<>.[73]

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[68] In his correspondence with Rosenthal, he calls them Rylean items: Wilfrid Sellars to David Rosenthal, "The Rosenthal-Sellars Correspondence on Intentionality," in Intentionality, Mind, and Language, ed. Ausonio Marras, (Chicago: University of Illinois Press, 1972): 461-503. In "Abstract Entities," 49, he calls them "linguistic types."

[69] Ibid.

[70] Wilfrid Sellars to David Rosenthal, 475.

[71] Wilfrid Sellars, "Notes on Intentionality," in Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967), 136.

[72] Wilfrid Sellars, Science and Metaphysics: Variations on Kantian Themes (London: Routledge and Kegan Paul, Ltd., 1967), 160. Also, "Notes on Intentionality," p. 662

In his correspondence with Rosenthal, Sellars also introduces a disjunctive quoting device which mentions either a Rylean or an Ockhamite item. He calls this disjunct a Fregean item, and it is mentioned by putting it in dot-diamond quotes, e.g., ·<>cat·<>.[74]

The following chart summarizes these quoting conventions:

| ORDER | TOKENS | TYPES |
|---|---|---|
| WRITTEN (NATURAL ORDER) | c-a-t or c^a^t | *cat* |
| SIGNIFICATION (LOGICAL) | ′cat′ or "cat" | ·cat·<br>(Rylean) |
| MENTALESE | <cat> | <<cat>> or<br><>cat<><br>(Ockhamite) |
| FREGEAN | | ·<>cat·<><br>(Rylean or Ockhamite) |

[Note: Sellars′ use of various quotation devices has to be distinguished from his informal use of double quotes and single quotes to either mention, illustrate, or emphasize a linguistic item.]

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[73] Sellars to Rosenthal, 493.

[74] Ibid., 493.

Sellars is not always consistent in distinguishing dot-quotes from double French-quotes. For example, in "Being and Being Known,"[75] he introduces dot-quotes for "mental words." But if he is to be consistent with his conventions in the above table, this should be done with double French-quotes.

Sellars claims that dot-quoting has an ordinary language analogue in the following suffixes for forming common abstract nouns: "-hood", "-ity", "-ness", "-tion", "-ship"; and for forming the common noun for propositions it uses the "that _____" construction.[76] The following identities are consequences:

Triangularity = the ·triangular·

That it is raining = the ·it is raining·[77]

## 6 (2) MEANING

In Sellars' view, classical semantical discourse (involving the use of such words as 'means', 'denotes',

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[75] Wilfrid Sellars, "Being and Being Known," in Science, Perception, and Reality, 43.

[76] Sellars, "Abstract Entities," 62-63;idem, "Conceptual Change," in Essays in Philosophy and its History (Dordrecht, Holland: D. Reidel, 1975), #40; idem, Naturalism and Ontology (Reseda, California: Ridgeview Publishing Company, 1980), 94, #72.

[77] Sellars, "Abstract Entities," 66.

'refers', 'truth', and their cognates) construes semantical words as relation words, linking together a verbal expression and some referent (object, state of affairs, or a thought). But, according to Sellars, this is a mistake. For example, consider the formula: "rot" means red.

> The rubric ' "..." means ---' is a linguistic device for conveying the information that a *mentioned* word, in this case '*rot*', plays the same role in a certain linguistic economy, in this case the linguistic economy of German-speaking peoples, as does the word 'red', which is not *mentioned* but *used*--used in a unique way; *exhibited*, so to speak--and which occurs 'on the right-hand side' of the semantical statement.[78]

Semantical statements of the form: ' "..." means ---' are not to be understood as expressing a relation between "..." and --- ; rather they are to be understood as using variants of the copula to express sortal classifications of linguistic functions (uses, roles) having the form: "..." is a(n) ---.

A more detailed formulation relativizes the subject term to a language and dot-quotes the sortal predicate: 'D' (in L) means ·G· (where "L" names a specific language). And a still more perspicuous formulation reformulates the subject term as a distributive singular term, substitutes a copula for the 'means' term (and cognates), and expresses the grammatical form for the sortal predicate: the 'D' (in

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[78] Sellars, "Philosophy of Mind," 163.

L) is a ·G·.[79] Sellars gives the following explicit directions for expressing such formulas:

> (a) 'Means is a specialized form of the copula. (b) What follows 'means' is to be construed as a metalinguistic sortal. (c) The subject of a 'means' statement is a metalinguistic distributive singular term.[80]

This treatment entails that the expressions 'means', 'denotes', 'stands for', 'refers', and their cognates are variants of the copula. The left side mentions a word or phrase whose meaning is sought, while the right side-functions as a predicate expression, using a familiar word or phrase by which to illustrate and to convey the meaning-as-linguistic function.

The concept of a proposition is a concept of a functional role of a sentence (abstracted from any particular linguistic vehicle). It is not a concept of a thought or anything non-linguistic; rather, it is the concept of a trans-linguistic functional role (i.e., as exemplified in various languages). Thus, "Das ist rot" and "This is red" express the same (or similar) propositions by playing the same (or similar) role in the observation-inference-volition transitions in their respective linguistic mediums.[81]

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[79] Sellars, "Abstract Entities," 232-6.

[80] Sellars, "Conceptual Change," 181.

### (3) POLEMIC WITH CHISHOLM

One objection to this semantical view of intentionality is that it evades the real issues. Chisholm insisted on the need for more resources than those provided by Sellars. The objection is that these meager resources do not account for the intentionality (or meaning) of thoughts. Sellars' way out is to analyze intentionality through meta-linguistical resources of the Ryleans.

Chisholm, in their correspondence, argued that Sellars could not explain the concept of meaning without presupposing the concept of a non-linguistic thought. The Chisholm-Sellars correspondence is ultimately the question of what distinguishes a "meaningful" language from the sound productions of a parrot. Sellars' position in this debate was to argue that:

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[81] The only criticism of Sellars' treatment of distributive singular terms that I am aware of came from Nicholas Wolterstorff, "On the Nature of Universals," in Universals and Particulars: Readings in Ontology, ed. Michael J. Loux (New York: Anchor Books, 1970), 170. He objected to the following formula involving distributive singular terms: The K is f = All K's are f (necessarily). His criticism was that "The K is f" is ambiguous. Sometimes the correct translation should be 'Most K's are f' or 'All (most) normal K's are f', or 'Typically all (most) K's are f'.

Sellars seems to have taken stock of this "criticism" in the following passage: "Notice that although there are monster lions, e.g., malformed lions with five legs, this fact does not impugn the truth of

The lion is a quadruped.

Normal lions have four legs." Sellars, Naturalism and Ontology, 90.

> the metalinguistic vocabulary in which we talk about linguistic episodes can be analyzed in terms which do not presuppose the framework of mental acts; in particular, that
> ". . ." means p
> is not to be analyzed as
> ". . ." expresses t and t is about p
> where t is a thought.[82]

It seems to me that Sellars was arguing on the basis of two presuppositions. The first was that for the proposition q to be the analysis of the proposition p for a person S, S must have the concepts contained in q. The second was that we are dealing with a Rylean situation in which the person has a concept of a meaningful sentence, but does not have a concept of a thought, i.e., other than as a non-parrotingly made sentence. Given these presuppositions, it is obvious that the quoted formula cannot be an analysis in Sellars' sense; though the formula can serve as an explanation. At the end of their correspondence, Chisholm concedes relative to the presuppositions, but objects to Sellars' requirement for an analysis.

Chisholm should have conceded that the above so called "analysis" is really what Sellars calls an "explanation", and expressed his disagreement relative to this terminological concession. Of course, Sellars would have agreed that the above formula does express an explanation.

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[82] Sellars to Chisholm, 522.

But that would have been only a superficial agreement. The root disagreement concerns Chisholm's claim that there could be thoughts without language. And here Sellars, if he were more discerning, could make a distinction between conceptual and non-conceptual thoughts, and concede that there could be non-conceptual thoughts without language but also deny that there could be conceptual thoughts without language. And possibly Chisholm would agree. But neither Sellars nor Chisholm made such a distinction and their exchange ended on an impasse.

## (4) IMPOTENCE OF EXTENSIONAL SEMANTICS

Given the various mentioning quotes, Sellars' major thesis is that semantical statements are in the order of signification: they classify words as role players. It is a mistake to try to relate words as mentioned role players with the real order, as is done, for example, in the Tarski-Carnap semantics. The formula

'feline' denotes cat

which has the form

(linguistic item) R (non-linguistic item)[83]

is ill-conceived in this semantics. The formula presupposes that a perception (or observation) of a cat is different from a thought of a cat (as expressed in a linguistic token of "cat"). To this Sellars responds: "My view, on the contrary, is that 'observations' are themselves thoughts; they are thought-tokens which are correct responses to the objects which caused them."[84] Since a cat is not a role player in the order of signification, the formula should be recast in the following way:

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[83] Sellars, Science and Metaphysics, 83.

> For some S, 'feline' (in E) stands for S, and S is materially equivalent to ·cat·

['S' is a variable taking dot-quoted expressions as substituends.]

This formula is materially equivalent to:

> (x) x is a feline iff x is a cat

Sellars presents other extensional formulas in terms of such intensional formulations.[85] These reconstruction are provided as evidence for the claim that "extensions are limiting cases of intensions."[86]

The main reason Sellars rejects extensional semantics is because such a semantics is incompatible with his rejection of the myth of the given. Extensional semantics presupposes that two types of entities can be identified: an item in a language and an item in the world.

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[84] Wilfrid Sellars, Rockefeller University, to Gilbert Harman, Princeton University, February 26, 1970, 4-5.

[85] Sellars, Science and Metaphysics, 84-86.

[86] Ibid., 77, #43.

But if there is no awareness independent of a language, then the awareness of an item in the world must be, for Sellars, mediated by a conventional language. Suppose a person knows an item T in the world through a word 'D' of language L. If he is to be aware of this T it must be through a metalanguage ML which expresses the functional classification of 'D' (in the 'D'-T complex) as a ·D·.

In extensional semantics the presupposition is that on the one hand there is the language L and on the other hand the world; both standing in some relation R to each other. But on the Sellarsian model the situation must be such that on the one hand there is the language L and on the other hand an L-World complex formed by a (causal) conditioned association. Apparently the relation between a language L and a complex L-World is a relation that hooks up between the Ls. All semantical assertions are ultimately language-language comparisons.

### (a) TRUTH

Sellars approach to the meaning of truth is such that it is also a language-language relation. His account is a variant of Tarski's. Tarski analyzed truth by the formula:

'p' is true iff p

Sellars considers this formula to be inadequate. It requires some revision. The first revision is to change the scare-quotes to dot quotes in order to make the formula apply to inter-linguistic roles, thus:

the ·p· is true iff p

Second, Sellars views the truth statement as itself authorizing an inference to p. He puts it this way:

> 'True' then means semantically assertible (S-assertible) and the varieties of truth correspond to the varieties of semantical rule. From this point of view
>
> the ·snow is white· is true
>
> has the sense
>
> the ·snow is white· is S-assertible:
>
> and the implication
>
> that snow is white is true -> snow is white
>
> is not an element of an extensional definition of 'true', a recursive listing of truth conditions, as, in effect it is on Carnap's account, but is rather a consequence of the above intensional definition of 'true', in the sense that the assertion of the right hand side of the implication statement is a performance of the kind authorized by the truth statement on the left.[87]

On this rendition, to say that p is true is simply to permit saying p.

## (b) CRITICISM OF LINGUISTIC IDEALISM

An apparent consequence of viewing semantics in the Sellarsian way is that we seem to be trapped in language, and cannot talk about a language-world relation. Any attempt to talk about a world independent of language involves a dependence on language. Let me call this 'linguistic idealism'. The so-called 'hermeneutical circle', I believe, is a variant of this seeming inability to get beyond a language. Cornman, following Sellars here, expresses this predicament succinctly in the following way:

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[87] Ibid., 101.

> What I shall try to show is that designation rules of the form of:
> I. 'p' (in L) refers to q
> and sentences of the form of:
> II. 'p' (in L) refers to what 'q' in this language,
> i.e. the language I am now using, refers to are logically equivalent and therefore that designation rules merely relate 'p' to another linguistic expression, 'q'.[88]

This piece of reasoning had repercussions on Cornman's overall view of metaphysics. Following Carnap, he distinguished internal from external questions about conceptual frameworks, and identified metaphysics with the attempt to ask external questions about the adequacy of any particular conceptual framework. But reflection on the above predicament, led him to conclude that at best metaphysics can only work with internal questions.[89] This predicament has its radical expression in the writings of Jaques Derrida who sees language as an absolute free play with signs, and less so in the writings of Richard Rorty who talks about culture as a (foundationless?) conversation. These consequences follow if ultimately there is no way available to anchor signs to extra-linguistic foundations, origins, or "givens". If this is the conclusion we are forced to, then I take this to be a reductio ad absurdum of Sellars' position. However, I take it, Sellars too is troubled by such an outcome.

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[88] James Cornman, Metaphysics, Reference, and Language (New Haven: Yale University Press, 1966), 127.

[89] Ibid., 193.

Sellars attempts to escape linguistic idealism through the Tractarian picturing strategy.[90] The claim here is that if we regard language from a naturalistic point of view as consisting of a concatenation of objects (ink-marks, sounds, or whatever), on the one hand; and the world as consisting of another grouping of objects, on the other; then the linguistic objects can be viewed as "picturing" the world more or less adequately through a complex manner of projection.[91]

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[90] W. Sellars, "Truth and Correspondence." Journal of Philosophy 59 (1962): 29-56. Reprinted as chap. in Science, Perception, and Reality. London: Routledge and Kegan Paul, Ltd., 1963. Idem, Science and Metaphysics: Variations on Kantian Themes (London: Routledge and Kegan Paul, Ltd., 1967), chap. 5.

[91] The inability of Kant or Peirce to appreciate this strategy is, in Sellars' view, their major flaw: "The basic flaw in the Kantian system (as in that of Peirce) is in its inability to do justice to this fact. The insight that logical form belongs only to conceptual acts (i. e., belongs to "thoughts" rather than to "things") must be supplemented by the insight that "thoughts" as well as "things" must have empirical form if they are to mesh with each other in that way which is essential to empirical knowledge." W. Sellars, "Some Remarks on Kant's Theory of Experience," Journal of Philosophy 64 (1967), 61.

Sellars is cautious in this formulation of picturing. He is not offering a correspondence theory of truth, which would presumably have the formulation:

(statement) pictures (fact);

instead, he writes:

> The schema for picturing is not
> (statement) pictures (fact)
> but rather
> (object) pictures (objects).[92]

I see Sellars' strategy here as expressing a necessary condition for any kind of representation. This seems to be conceded by Sellars when he writes to Harman: "The truth of basic sentences, however, involves, indeed is grounded in, the existence of a relation of picturing between tokens of the sentences and the objects to which they refer."[93] Later in his letter to Harman he expands to make the picturing relation also a sufficient condition for semantic assertibility of truth: ". . . correspondence to the relevant objects is a necessary and sufficient condition of the semantical assertibility of a basic statement . . ."[94] In a subsequent letter to Harman, Sellars expressed the intention (in a future letter, which never was written[95]) to satisfy you that it follows from my account of picturing that (leaving dot-quote niceties and tenses aside)

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[92] Wilfrid Sellars, Rockefeller University, to Gilbert Harman, Princeton University, February 26, 1970, 7.

[93] Wilfrid Sellars, Rockefeller University, to Gilbert Harman, Princeton University, February 26, 1970, 18.

[94] Ibid., 19.

"a"s which are concatenated with an "f" [f*"a"s]  
picture a (correctly) iff fa  
(not, as you put it,  
"f"s picture a iff fa).[96]

I find the idea of the picturing relation as providing the sufficient condition for the semantic assertibility of fa puzzling, unless the notion of picturing (i. e., projection) is so understood as presupposing a relevant psychological state of a person, a sizeable chunk of (or even the whole) language, and a knowledge of the contexts of utterances. These presupposed conditions seem to be demanded by Sellars' holism about language.

The appreciation of which conditions for picturing are necessary becomes clearer once we try to describe a computer simulation of human language functioning.[97] From an ontological programmatic point of view, I see nothing objectionable to Sellars' picturing strategy.

However, if the picturing strategy were viewed from an epistemic point of view, it would beg the question.

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[95] I suspect that Sellars broke off the correspondence with Harman because of the paucity of Harman's reply to Sellars' second letter.

[96] Wilfrid Sellars, University of Pittsburgh, to Gilbert Harman, Princeton University, November 20, 1970.
This was the subject of Sellars correspondence with Rosenberg.

[97] See Wilfrid Sellars, "Being and Being Known," in Science, Perception and Reality, 50-59.

This would be so because each of the relata in the picturing relation has to be identified, and this identification requires epistemic and linguistic resources. Suppose I focus on the relation of

T-h-i-s i-s a-n i-c-e c-u-b-e

to an ice cube. For me to focus attention on these relata requires that I use the appropriate concepts, i.e., I must be able to say something like:

(T-h-i-s i-s a-n i-c-e c-u-b-e) R (ice cube). ('R' is the picturing relation)

And how am I to determine the truth of this relation? Am I to go to a meta-picturing relation, and so on to infinity? I don't see how Sellars can extricate himself from this predicament.

Margolis also objected here

However, by using the distinction between an rs- and a conceptual representational system, I can see a way of escaping linguistic idealism, and a way of defending a modified version of extensional semantics and a picture (read that 'correspondence') theory of truth.

What I need first is a way of referring to non-conceptual thoughts. I have been doing this by prefixing 'rs-' to the appropriate concepts. The domain of rs-concepts must be restricted to experiences with a sensorial content. Moreover, our vocabulary about these sensorial contents must have a dual association: one with rs-concepts and one with "logical" concepts. And we can say that at least for perceptual claims that part of their meaning consists in an association with an rs-meaning. We can even exploit Sellars' strategy by claiming that for perceptual reports 'p' (in L) means ·rs-p·.

A possible objection to this strategy may be that I am resurrecting a denoting theory of meaning, i. e., what Ryle had called the "Fido"-Fido theory of meaning. This is not the case. The theory of meaning that I am advocating is the same as Sellars'. What must not be overlooked is, first, that in the denotational theory "Fido" is a mere noise, whereas on my construal it is already a mentioned word in some language L. Second, the denotational theory uses a second occurrence of "Fido" to refer to an object; whereas on my construal the second occurrence of "Fido" (more properly ·rs-Fido·) is also a mentioning use of a symbol in a representation system. My approach, like Sellars, is a translational view of meaning--a translation between two representational systems; whereas the denotational theory makes no such assumptions.

## 3. 3rd STAGE: THEORETICAL DISCOURSE

### a. THE TRUNCATION PROBLEM

However, there are other sorts of problems for Sellars' account of introspection at the rudimentary level of consideration. I have credited Sellars with the equivalence thesis (EQ), which is the idea that the Ryleans thinking is simply talking-out-loud.[98] And, of course, Ryleans can talk about having the disposition to talk-out-loud. So the Ryleans have the concept of non-parroting intelligent speech, and the concept of dispositions for such speech. But they do not have the concept of a thought as distinct from speech episodes or propensities for such speech episodes. To have these concepts they require the possession of meta-speech episodes. And there is no difficulty in granting this further ability to the Ryleans as well.

The problem is to provide an account of a concept of thought in an episodic sense which is distinct from either a concept of a disposition to talk or the concept of talk itself. In what follows, I have tried to reconstruct through a sequence of steps Sellars' account of how the concept of an episodic thought is learned. My misgivings are with steps 5 and 9.

Sellars' account can be viewed as consisting of the following theses:

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[98] This is denied by Gilbert Harman in "Sellars' Semantics," Philosophical Review 79 (1970), 406: "It is not obvious that thinking-out-loud is a kind of thinking." His point seems to be that to attribute thinking-out-loud presupposes "unexpressed psychological states and occurrences." Ibid., 407. This is conceded by Sellars from our ontological point of view, but denied from the epistemic point of view of Ryleans.

(1)
In the Manifest Image we have actual experiences of unexpressed conceptual thoughts

(2) What is actual is possible.

(3)
Language and thought are connected for the Ryleans at time $t_1$.

(4)
Language and thought are severed for the post--Ryleans at time $t_2$.

(5) Language and thought are severed by . . . (?)

I am leaving (5) as an ellipsis because I don't know what Sellars would say here. But it is clear that he needs this as a step in his account.

> although 'Ø -> V' is the natural unit with respect to acquiring a conceptual apparatus . . . actually the process can be truncated. Behavior which was originally conceptual as built on 'thinking out loud' (Ø -> V), can become conceptual as being built on Ø without V. Behavior which was originally a function of (Ø -> V) becomes a function of Ø.[99]

In order to get from the Rylean to the Manifest framework, there must be a mechanism by which the thought-language tie is severed and a thought-(non-linguistic) behavior tie substituted. And this must be something that occurs without human intervention if it is a phenomenon which needs explanation. But as far as I can tell, Sellars never gives an account of how such a severance is likely or even possible. So we must assume such a severance. But how exactly is the truncation phenomenon to be described? At best the Ryleans can suppress loud talk to a kind of mumbling to oneself, and perhaps suppress it to a stage of having Watsonian laryngeal movements. But what will cause a suppression of these? Sellars never gives an account of the suppression of speech to the extent that only conceptual thoughts occur. He simply assumes that some mechanism of suppression is available so that there are thoughts without verbal expression.

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[99] Sellars to Castañeda, 5.

In addition to this, there is another phenomenon that bothers Sellars, and which needs an explanation.

> (6)
> Ryleans are sometimes observed to behave intelligently even when there is no overt talking going on.

Ryleans must be able to act intelligently without this being the outcome of consciously entertained thoughts; otherwise if they are conscious of their thoughts as causing intelligent behavior, there is nothing for Jones to explain. Thoughts would already be introspected.

> (7)
> To explain non-verbal intelligent behavior, a genius, Jones, formulates a theory that there is something like talking going on whenever people act intelligently.

By 'theory' in this context Sellars means the introduction of unobservable entities by analogy to observable models. The Ryleans are introduced to a theory that thinking is to be understood on the model of overt talking. The analogy between thoughts and language is a second-order, formal analogy. It cannot be a first-order material analogy for the simple reason that the vehicles of thought are for Sellars neurological states. Sellars explains this theory introduction:

> According to our philosophical myth, a proto--scientific member of the community, Jones by name, develops the hypothesis that people's propensities to think-out-loud, now this, now that, change during periods of silence as they would have changed if they had, during the interval, been engaged in a steady stream of thinkings-out-loud of various kinds, because they are the subjects of imperceptible episodes which are:
> (a) analogous to thinkings-out-loud;
> (b) culminate, in candid speech, in thinkings--out-loud of the kind to which they are specifically analogous;
> (c) are correlated with the verbal propensities which, when actualized, are actualized in such thinkings-out-loud;
> (d) occur, that is, not only when one is silent but in candid speech, as the initial stage of a process which comes 'into the open', so to speak, as overt speech (or as sub-vocal speech), but which can occur without this culmination, and does so when we acquire the ability to keep our thoughts to ourselves.[100]

Note that the assumption introduced here is that

> (8)
> People undergo a change in propensity about what they will think-out-loud.

Jones intends to provide an explanation for this change of propensity. ¶ It seems that we need an explanation of something more basic, namely, thinking-out-loud. And whatever explanation is given for this, it seems, could be given for the change in thinking-out-loud. This is a complicated matter because the Ryleans make observational reports, inferences, and express intentions. We can also assume, I take it, that they express desires such as hunger or wanting to find something. How are these various thought-out-loud to be explained? Well, the observation reports will be made on occasions of observing, inferences on occasions of hearing thoughts-out-loud, and volitions on the occasion of expressing desires. And how is the expression of desire to be explained within the Rylean context? I suppose by something like the Skinnerian correlation between a state of deprivation and an expression of that state.

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[100] Sellars, Science and Metaphysics, 159.

If these are the normal types of explanations for the Ryleans, then in the case of a change in propensity to think-out-loud, this can be explained by the same means. The Ryleans can refer to unobserved observations, unobserved thoughts-out-loud, and unknown deprivations.

But this is not the sort of explanation that Sellars puts in Jones' mouth. Jones' explanation is that

> (9)
> People who undergo a change in propensity to think-out-loud are subjects of imperceptible episodes.

Why doesn't Jones posit the occurrence of unperceived _perceptible_ episodes? This seems the likelier course to pursue.

But even prior to the need to explain _private_ thoughts, it seems that Ryleans would be confronted with a need to explain anomalous perceptions, such as hallucinations, abnormal desires, and abnormal emotional upheavals.[101] It seems to me that Jones would need to introduce something like a privately perceptible world rather than private thoughts.

Sellars, however, bypassing this route, makes Jones give explanations which in effect are modeled on Rylean inferences. Inferences in the Rylean community are verbal responses to verbal promptings; so in the Rylean theory all verbal responses are the outcomes of non-verbal-like promptings.

> (10) Jones' theory will serve the function of making the unconscious thoughts conscious by training people to respond conceptually to their thoughts.

Assuming that the other steps in the reasoning are acceptable, there is nothing objectionable to the idea that people can be trained to respond to their theoretical states. This is aptly demonstrated by the techniques of biofeedback training.

Still, Sellars' position has a gap. The Rylean myth leaves us with an unsolved problem of how thought is severed from language; so his account of how his position is possible is incomplete. According to Sellars, to have a thought is to say and to have the propensity to say p. But it makes little sense to identify the thought with the propensity. The propensity is to have a thought (when verbalized). In this context to talk about suppressing the verbalization is simply to suppress having a thought. What Sellars needs is not a propensity to talk, but an episode which is a thought. But what can this episode be? It is simply the episode of talking.

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[101] I have in mind here the book by Bruno Snell, The Discovery of Mind: The Greek Origins of European Thought, trans. T. G. Rosenmeyer (Harvard University Press, 1953; reprint, Harper Torchbooks, 1960). The relevant point made in this book is that the early Homeric Greeks externalized their abnormal psychological states as divine products.

Does this account help to explain how people can recognize their non-linguistic thought episodes? I don't believe it does. Sellars' assumed without argument that the original tie between language and thoughts can be severed. But the nature of this severance is totally mysterious. It is in fact incoherent from Sellars' assumptions. Secondly, he has assumed that thoughts once severed from language can have a causal tie to non-verbal behavior, so that the behavior is intelligible. Thirdly, he has assumed that such intelligible behavior can be unconscious (i.e., unrecognized). Fourthly, he assumes that his genius Jones by teaching a theory of thoughts which (per assumption) are unconscious will become conscious.

I find Sellars concept of a thought as something analogous to speech perfectly acceptable. But accepting this thesis does not aid in trying to settle the question whether thoughts can exist independently of language. Thinking becomes understood as silent talk. And in fact there is a neuro-physiological process taking place when we talk. When however this brain activity is responded to without overt talking, the Ryleans have learned to recognize their thoughts directly. So learning to recognize thoughts amounts to responding to the brain activity which took place while learning to speak and suppressing the speech.

The reason Sellars' account has troubles is because it conflates non-conceptual with conceptual thought. Sellars says that a child "learns to think in the course of learning a language." But such a thesis is misleading. In one sense, as Jean Piaget argues, a child learns to think non-conceptually independently of language; on the other hand, it learns to think conceptually in the course of learning a language. Sellars does not always keep these distinction in mind.

Given this distinction, it is not evident to me that step (1) is true. Perhaps all our unexpressed thinking is non-conceptual thinking. In that case steps (4) and (5) are not needed. The claim would be that all conceptual thinking is and remains overtly linguistic. In that case, what about step (6)? The non-linguistic intelligent behavior can be explained by the theory of non-conceptual thinking. It is at this point that we can accept step (7), as the thesis that non-conceptual thought is analogous to conceptual thought. (8) is acceptable, while (9) is offered without considering the more plausible explanatory hypothesis which appeals to perceptible experiences. What about (10)? This seems to be superfluous. Instead I propose the thesis that in the course of learning conceptual thought, one learns to conceptualize one's non-conceptual thoughts.

But let me be cautious here. Sellars is not describing our present conceptual framework, but an antecedent framework from which to generate our present framework. Before he introduces the mechanisms for introspection, Sellars needs to get agreement from us about the causal relation of thoughts (as brain states) to their expression in language. From a theoretical (ontological) point of view, according to Sellars, the relation between thought and talk is a causal one: talk is a culmination of thought. Let us call this the Causal Thesis:

(CT) ∅ -> V ['->' is a causal relation]

He puts it this way:

> thoughts originally occurred as initial stages of the unitary process
>
> ∅ -> V
>
> where '∅' stands for *thought* and 'V' for *overt verbal behavior*. Doing, seeing, intending, recognizing, etc. were *conceptual* or *rational* as threaded on what *we* would call 'thinking out loud'.[102]

To learn any language, Sellars assumes that humans have the ability to be trained to respond to situations with sounds. Since he does not allow for conceptual awareness prior to having a language, the learner cannot be conceptually aware of the situation to which he is responding; though he must evidently be impressed non-cognitively by the situation. That is, Sellars assumes at this stage that there are non-cognitive states eliciting a response through conditioning.

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[102] Wilfrid Sellars to Henri-Neri Castañeda, "Correspondence between Hector Castañeda and Wilfrid Sellars on Philosophy of Mind" (unpublished manuscript, 1961-1962), 5.

But surely this ontological dependence of verbal expression on conceptual thinking from a genetic point of view must be that a conceptual thought (as a neuronal patterning) is brought about only by learning to think-out--loud: "the ability to have thoughts is acquired in the process of acquiring overt speech."[103] This amounts to the claim that the necessary causal condition for thoughts is learning to speak, which we can formulate as the Genetic Causal Thesis that

(GCT) $V \rightarrow \emptyset$

If this were a mitigated claim concerning some thoughts, as expressed in

(GCT′) For some thoughts, $V \rightarrow \emptyset$

then I could accept the claim. But the problem is that (GCT) as well as (CT) conflate the distinction between non-conceptual representational systems and conceptual thoughts. Let's refer to them as thoughts-1 or $\emptyset$-1 and thoughts-2 or Ø-2, respectively. And let me also make a distinction between verbal expressions as non-conceptual or V-1 and as conceptual or V-2. Now given these distinctions, it isn't even clear what Sellars' claims are. What is not clear is the nature of the thoughts which pre-linguistic people are said to have. If Sellars' system is to have the kind of coherence that it seems to have, Sellars must say that pre-linguistic people have thoughts-1 and not thoughts-2. And it is clear to me that he would agree that (CT) and (GCT) apply to thoughts-2, such that

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[103] Sellars, "Philosophy of Mind," 188.

> (EQ) V-2 ME Ø-2 ['ME' is the sign for material equivalence]

This is simply a reformulation of the idea that all Rylean conceptual thinking is thinking-out-loud.

What is not clear is the status of thoughts-1 in his framework. Is it the case that

> (CT-1) Ø-1 -> V-1 ?

This expresses the idea that a non-conceptual representational state causes some state (possibly verbal) which is a symptom or expression of Ø-1. Did Wittgenstein have something like this in mind when he wrote "the verbal expression of pain replaces crying and does not describe it?"[104] I see no reason for Sellars to reject (CT-1), so I will assume he accepts it. The controversial thesis, however, is

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[104] Ludwig Wittgenstein, Philosophical Investigations, trans. G.E.M. Anscombe (New York: Macmillan Company, 1953), I-244.

(CT-2) Ø-1 -> V-2

This is the thesis that we are able to respond conceptually to non-conceptual states. Here we must be careful in our interpretation so as not to get the myth of the given. Sellars' position is that the types of V-2 available as means of responding to Ø-1 are restricted by our linguistic resources. Specifically the restriction is in the categorial kinds which we are able to express by V-2.

But I find an ambiguity here. On the one hand Ø-1 is a primitive state, supposedly unaffected by conceptual refinements such that there is a part of V-2, call it V-e, that is correlative to Ø-1. And there is a part of V-2 that is superfluous--it could be theoretical--to Ø-1. And it may also be the case that V-2 has no part which is correlative to Ø-1 (I am thinking of fictitious entities as named by V-2).

To make this discussion connect with the philosophical literature, think of 'V-2' as a 'perceptual report',' V-e' as an 'expressive judgment', and 'part of' as 'phenomenological reduction of', 'Ø-1' can be viewed as the 'given'.

Sellars' position, I believe, is that though V-e is correctly understood as a phenomenological reduction of V-2, there is a conceptual restriction to the type of V-e available. This brings us to the problem of whether phenomenal reports are available for the justification of empirical knowledge; so I will postpone any further discussion along these lines to the chapter on Foundationalism.

R.C. Collingwood, "The Principles of Art," 1938
(Oxford U. Press, 1958):

calls it
"~~the~~ psychical level"
as contrasted with "spirit"

"... it seems that our sensuous-emotional nature, as feeling creatures, is independent of our thinking nature, as rational creatures, and constitutes a level of experience below the level of thought." p. 163

"[it has the] character of a foundation upon which the rational part of our nature is built, ~~and~~ ~~and~~ ..." p. 163

"I hold that the proper business of psychology is to investigate this level [psychical] of experience, and not the level which is characterized by thought" p. 164

# CHAPTER 7

# FOUNDATIONALISM

My purpose in this chapter is to locate Sellars' stance in the Foundationalist/Non-Foundationalist controversy. He is reputed to be a Non-Foundationalist--even the father of Non-Foundationalism--because of his rejection of "the given"; and it is held that his essay "Empiricism and the Philosophy of Mind" (originally titled "The Myth of the Given") is the locus classicus for Non-Foundationalist arguments. I will take Laurence Bonjour's book The Structure of Empirical Knowledge to be a good representation of this view.

The only commentators that I am aware of that have dissented from calling Sellars a straightforward Non-Foundationalist are Cornelius Delaney, James Cornman, and William Alston.[1]

Delaney argues that Sellars' position is a dialectical overcoming of both foundationalism and coherentism through a rejection of their common presupposition that there is only one kind of inference at issue; where in fact there are really two kinds--a primary level and a metalevel inference. Coherentists are right that justification of basic empirical reports requires inference, but they are wrong in thinking that it requires primary level inference. Foundationalists, on the other hand, are correct in rejecting primary level inference, but they are wrong in rejecting metalevel (trans-level) inference.

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[1] C.F. Delaney, "Theory of Knowledge" in The Synoptic Vision: Essays on the Philosophy of Wilfrid Sellars, ed. C.F. Delaney, Michael J. Loux, Gary Gutting, W. David Solomon (University of Notre Dame Press, 1977): 1-42.

James Cornman, "Foundational versus Nonfoundational Theories of Empirical Justification," American Philosophical Quarterly 14 (1977): 287-297.

William P. Alston, "What's Wrong with Immediate Knowledge?" Synthese 55 (1983): 73-96.

Cornman, in his own right, is also correct in pointing out that "Quine and Sellars can be foundationalists."[2] His point is that the argument in Sellars' "Empiricism and the Philosophy of Mind"[3] is directed only against foundationalism construed as claiming that reports about physical objects are basic (what I will call Pseudo-Foundationalism). And, he notes correctly that this argument is not against foundationalism construed as reports about phenomenal reports (what I will call Genuine Foundationalism).

Alston too is wary of presenting Sellars as a straightforward Non-Foundationalist:

> It may be doubted that Sellars can be counted among the foes of immediate knowledge, for he is wont to

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[2] Cornman, "Empirical Justification," 296.

[3] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963).

present his position as a sort of synthesis of foundationalism and coherentism.[4]

Both Delaney and Cornman are right, but they fail to carry the reasoning far enough. Bonjour carries the reasoning a step further in the right direction by entertaining the possibility of an a priori defense of Foundationalism. In speculating on various defenses of Foundationalism, he attributes an a priori justification to Lewis, Chisholm, and Firth. He even speculates that if Foundationalism is to be justified at all, it will have to be justified on a priori grounds. His two shortcomings are his failure to include Sellars in this group, and his failure to spell out that the form of an a priori justification should be a transcendental argument.

I will argue that Sellars has an a priori defense (transcendental argument) for a version of Pseudo Foundationalism. Simply put, the justification for the reliability of reports about physical objects is that if they were not reliable for the most part, then we wouldn't have empirical knowledge. Their reliability is a necessary condition for the very possibility of empirical knowledge. This has been missed by most expositors of Sellars' epistemology--including C. F. Delaney and L. Bonjour.

To put matters in perspective, I will start with the classical analysis of (empirical) knowledge--which

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[4] Alston, "Immediate Knowledge," 80.

Sellars accepts--as 'justified true belief'. I will state the regress problem for a justification of knowledge, and indicate how Foundationalism is introduced as a solution. Next, I will point out a scope difference between the classical and the contemporary approaches. And I will distinguish Pseudo Foundationalism from Genuine Foundationalism. I will agree that Sellars has refuted a version of Pseudo Foundationalism, but not Genuine Foundationalism--a position I will defend with a transcendental argument. Finally, I will present objections to Sellars' argument against Genuine Foundationalism.

## I. ANALYSIS OF KNOWLEDGE

The theory of knowledge has its explicit origin in Plato's attempt in the dialogue Theaetetus to distinguish true opinion from knowledge. Starting from this intention, the distinction has ossified into the formula that knowledge is true judgment (opinion, belief) with a "logos," "account", "warrant", or "justification". As Bonjour puts it: "'A knows that P' if and only if '(1) A must believe confidently that P, (2) P must be true, and (3) A's belief that P must be adequately justified'."[5] Sellars agrees with this analysis: "The explication of knowledge as

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[5] Laurence Bonjour, Structure of Empirical Knowledge (Cambridge: Harvard University Press, 1985), 9.

'justified true belief' . . . remains the orthodox or classical account and is, I believe, essentially sound."[6]

Bonjour adds that a theory of adequate justification must also provide a metajustification, or vindication:

> it is incumbent on the proponent of such an epistemological theory to provide an argument or rationale of some sort to show that his proposed standards of justification are indeed truth-conducive . . .[7]

Most of the discussion has centered on providing an unpacking of "adequate justification." Since the concern with the justification of knowledge is ultimately a concern with how to minimize error and how to maximize truth or, at least, verisimilitude, an 'account' is intended to be a specification of a reasonable guide to these ends. And the metajustification (vindication) is to apply to any such proposed guide.

Broadly speaking, we may say that the methods which secure truth and minimize error are deductive and inductive (including abductive) reasoning. Deductive reasoning secures true conclusions relative to the truth of the premises; while inductive reasoning operates with the less secure truth preserving criterion of reasonableness (warrantedness, probability). Bonjour's demand for meta-justification would require a vindication of deduction and induction. Let us assume that both deductive and inductive methods are reliable. Still the philosophically interesting question is to probe for the ways that the truth of the premises (including hypotheses) of deduction and induction are themselves justified. The immediately obvious available answer is that the premises are justified on the basis of previous deductive or inductive arguments. But we can again repeat our request for the justification of the truth of these prior premises, and we are off on an infinitely regressive path of justifications. How to terminate this kind of questioning constitutes the regress problem concerning the justification of knowledge. There seem to be only a few possible answers. Bonjour formulates these nicely in the following passage.

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[6] Wilfrid Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda, (Indianapolis: The Bobbs-Merrill Company, Inc., 1975), 332.

[7] Bonjour, Structure, 9.

> (1) The regress might terminate with beliefs which are offered as justifying premises for earlier beliefs but for which no justification of any kind, however implicit, is available when they are challenged in turn.
> (2) The regress might continue indefinitely "backwards," with ever more new empirical premise-beliefs being introduced, so that no belief is repeated in the sequence and yet no end is ever reached.
> (3) The regress might circle back upon itself, so that if the demand for justification is pushed far enough, beliefs which have already appeared as premises (and have themselves been provisionally justified) earlier in the sequence of justificatory

> arguments are again appealed to as justifying premises.
> (4) The regress might terminate because "basic" empirical beliefs are reached, beliefs which have a degree of epistemic justification which is not inferentially dependent on other empirical beliefs and thus raises no further issue of empirical justification.[8]

The other alternative, in view of the E. Gettier problem,[9] is to be sceptical. Few contemporary philosophers have taken the sceptic stance; but a few have--notably Peter Unger and Keith Lehrer.[10] Their scepticism amounts to the claim that given the concept of knowledge as requiring a certainty which guarantees truth, there is no empirical 'knowledge', strictly speaking; instead there are more or less justified or justifiable beliefs. In this sense, Sellars, too, is a sceptic. The more modest pursuit is to find the most reasonable beliefs, despite fallibilism. So even if it is granted (which it is not by Unger) that there is a distinction between justified (reasonable) and unjustified (unreasonable) beliefs, the regress argument still has its bite. The problem becomes how to spell out these conditions of reasonableness, and to determine whether some set of beliefs has a privileged place. Most philosopher who believe that there is a rational answer to the regress problem have opted either for "foundationalism" or "coherentism."

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[8] Bonjour, Structure, 22-23.

[9] Edmund Gettier, "Is Justified True Belief Knowledge?" Analysis 23 (1963): 121-123. This paper presents counterexamples to the formula that knowledge is justified true belief.

[10] Peter Unger, Ignorance: A Case for Scepticism (Oxford: Clarendon Press,1975).
Keith Lehrer, "Why Not Scepticism?" in Essays on Knowledge and Justification, ed. George S. Pappas and Marshall Swain (Ithaca: Cornell University Press, 1978): 346-363.

## II. THE CLASSICAL VIEW OF KNOWLEDGE

The traditional analysis of knowledge assumes two terminological conventions. For Plato the terminological convention was that (1) the object of "knowledge" must be unalterable, and that (2) it is possible to make a voluntary judgment about the truth or falsehood of a proposition about the object. This terminological convention presents problems in talking about a knowledge of truths about sense perception. Plato took it for granted that sense perception is about a Heracleitean flux, and that such 'cognition' is involuntarily indubitable. Hence such cognition, because it violates the two terminological criteria--by being about an alterable, and by being involuntarily indubitable--is not called 'knowledge'.

A similar terminology about 'knowledge' is preserved in Sextus Empiricus. He contrasts reports of sense phenomena (appearances) with (empirical) judgments: "Scepticism is an ability, or mental attitude, which opposes appearances to judgments in any way whatever. . .

";[11] and "By 'appearances' we now mean the objects of sense-perception, whence we contrast them with the objects of thought or "judgments."[12]

Sextus provides the marks of our cognition of sense phenomena whereby they are distinguished from knowledge: "we do no overthrow the affective sense-impressions which induce our assent involuntarily; and these impressions are 'the appearances'"[13] and

> The criterion, then, of the Sceptic School is, we say, the appearance, giving this name to what is virtually the sense-presentation. For since this lies in feeling and involuntary affection, it is not open to question. Consequently, no one, I suppose, disputes that the underlying object has this or that appearance; the point of dispute is whether the object is in reality such as it appears to be.[14]

The problem, as the Sceptics see it, is this. Cognitions present themselves as being of two types: those to which we find ourselves assenting involuntarily and those to which we can voluntarily decide to assent or not to assent. Those cognitions which force assent from us are the appearances; those to which we can give voluntary assent to are judgments. Knowledge, if it is to be found, for the Sceptic, is to be found within the realm of voluntary judgments. Knowledge is equated with justified true voluntary judgment, or, using the classical Sceptic terminology, knowledge is said to be true judgment according to the criterion. The criterion is that which is needed to warrant rational assent. This formulation, it should be pointed out, was intended by the Sceptics for only voluntary judgments. Since sense perception is involuntary, it was placed outside the realm of 'knowledge'. This use of 'knowledge' may be viewed by us as simply a terminological convention or proposal.

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[11] Sextus Empiricus, Outline of Pyrrhonism, trans. R.G. Bury, vol. 1 (Cambridge: Harvard University Press, 1933), 8.

[12] Ibid., 9.

[13] Ibid., 19.

[14] Ibid., 22.

The same terminological convention is to be found in Descartes, who talks of error in those areas of cognitions where we can voluntarily assent, dissent, or withhold both assent and dissent: "Now as to what concerns ideas, if we consider them only in themselves and do not relate them to anything else beyond themselves, they cannot properly speaking be false . . . "[15] and, "if I consider the ideas only as certain modes of my thoughts, without trying to relate them to anything beyond, they could scarcely give me material for error."[16]

We come across this Platonic-Sceptical-Cartesian terminology also in C. I. Lewis, who refrained from using the words 'knowledge' and 'judgment' in relation to sense presentations or 'the given'.[17]

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[15] Rene Descartes, "Meditations on First Philosophy," in The Philosophical Works of Descartes, trans. E.S. Haldane and G.R.T. Ross, vol. 1 (Cambridge: Cambridge University Press, 1967), 159.

[16] Ibid., 160.

> Apprehension of the presented quale, being immediate, stands in no need of verification; it is impossible to be mistaken about it. Awareness of it is not judgment in any sense in which judgment may be verified; it is not knowledge in any sense in which "knowledge" connotes the opposite of error.[18]

To forestall the objection that perceptions of objective facts, such as, for example, that what is before me is a pink ice cube also present themselves as involuntarily given, we must distinguish this kind of given which is dubitable from the kind of given which is indubitable.

It seems to me that the so called argument from "illusions"--a misnomer for all the ways that cause unveridical perceptions--was intended to draw this distinction between the dubitably and the indubitably given. The indubitable is the cognition which is couched in the phenomenal appearance terminology about phenomenal properties. This demarcation, I believe, coincides with that of the Platonic-Sceptical-Cartesian-Lewisian tradition which demarcates appearances from judgments.

The traditional analysis equates knowledge with justified true belief (i.e., voluntary judgment) or, using the Sceptic terminology, knowledge is true judgment according to the criterion. The criterion is whatever is needed to warrant assent to, dissent from, or suspension of judgment. This formulation, it should be remembered, was pertinent only to those beliefs which it is possible to judge voluntarily. Since sense presentations are involuntary, they are, in the classical terminology, outside the realm of 'knowledge'.

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[17] This use of 'the given' is appropriate if sense perceptions are presented to us involuntarily.

[18] C.I. Lewis, Mind and the World Order (New York: C. Scribner's Sons, 1929), 125.

Two terminological conventions have changed in the course of time from Plato to now. We talk of empirical knowledge, and the criterion of voluntary assent has been dropped.

## III. FOUNDATIONALISM

An examination of the literature on the foundations of knowledge quickly reveals a sort of tower of Babel, where talk is at cross-purposes. The reason for this is that the concepts of foundationalism and coherentism varies from author to author.

The term 'foundations' is a metaphor suggesting the foundations of some structure, usually a house; sometimes a pyramid. To have a contrasting metaphor for 'coherentism' the images of circles and rafts have been used. Here are Sellars' images:

> One seems forced to choose between the picture of an elephant which rests on a tortoise (what supports the tortoise?) and the picture of a great Hegelian ser-

> pent of knowledge with its tail in its mouth (where does it begin?). Neither will do.[19]

The foundations of the pyramid (or tortoise) is the metaphor for the justification of basic premises. How this justification is to be described varies in classical foundationalism. The proposed marks or criteria of basic premises have been certainty, incorrigibility, infallibility, indubitability, and/or self-warrantability.

By contrast the image of the raft (or serpent) will mean the requirements of consistency and coherence. How 'coherence' is to be understood has, like the notion of foundational security, several interpretation. For example, in C. I. Lewis we find the term 'congruence' and in R. Chisholm the term 'concurrence' used for this purpose; while in Sellars we come across the notion of 'explanatory coherence'. The notion of coherence and these related notions are meant, I suspect, to express the requirement of systematic logical, temporal, spatial, and causal relations.

But are foundationalism and coherentism contradictory alternatives? Since the defense of coherentism has been by way of an attack on foundationalism, i.e., a defense of non-foundationalism, in order to understand the foundationalist/non-foundationalist debate we need some minimal thesis which is in dispute. Let me, then, try to formulate it. If we view the situation abstractly and metaphorically, the foundationalism versus non-foundationalism debate could contain the following claims:

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[19] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 170.

(EC) The raft exists; there is no pyramid.

(EF) The pyramid exists; there is no raft.

(M) The pyramid and the raft both exist.

(MC) The raft is a necessary condition for the pyramid, but the pyramid is not the necessary condition for the raft.

(MF) The pyramid is the necessary condition for the raft, but the raft is not a necessary condition for the pyramid.

(W)

The pyramid and the raft entail each other.

I will call (EC) Extreme Coherentism and (EF) Extreme Foundationalism--no one holds such a view; (MC) is Moderate Coherentism, while (MF) is Moderate Foundationalism; (W) can be viewed either as Weak Coherentism or as Weak Foundationalism.

To decide which of these alternatives is defended by so called foundationalists and non-foundationalists, let us look at the writing of a self-proclaimed foundationalist-- Roderick Chisholm; and the writings of the self-conscious non-foundationalist--Laurence Bonjour.

I am not sure where to place others, including Sellars. And since I am writing about Sellars, I will shortly explain why there is a difficulty in placing Sellars at either end of these poles. Let me first turn to Chisholm. He defends a version of foundationalism which has a foundationalist and a coherentist aspect. He writes: "There are two moments of epistemic justification, one of them foundational and the other not."[20] As Chisholm sees the epistemic situation, both sets of metaphors will do: they express two aspects of knowledge. Now, this is a significant thesis. It indicates that foundationalism does not deny coherence as a necessary condition for securing knowledge. And if this is the pronouncement of a foundationalist, which seems to fit the alternative (W) of Weak Foundationalism, then a non-foundationalist, who opposes Chisholm, must be defending either (EC) or (MC).

I am not going to pursue the structural problem of how various types of beliefs are tied together as, for example, in various modes of induction or coherence; so I am not interested is dealing with the superstructure of the foundational-coherentist issue, save for one respect. I want to defend a necessary condition for foundationalism.

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[20] Roderick Chisholm, "A Version of Foundationalism," in The Foundations of Knowing (Minneapolis: University of Minneapolis Press, 1982), 13.

I will begin with the following characterization of Foundationalism by Laurence Bonjour:

> (F) the central thesis of epistemological foundationalism as understood here, is the twofold thesis: (a) that some empirical beliefs possess a measure of epistemic justification which is somehow immediate or intrinsic to them, at least in the sense of not being dependent, inferentially or otherwise, on the epistemic justification of other empirical beliefs; and (b) that it is these "basic beliefs," as they are sometimes called, which are the ultimate source of all justification for all of empirical knowledge.[21]

This formulation needs some clarification and qualification. First, Bonjour's formulation (F-b) is not quite satisfactory. It is misleading and it says too much. It is misleading by using the word 'source'. Elsewhere when he explains himself, he writes: "if inference from them [basic beliefs] is to be the sole basis upon which other empirical beliefs are justified . . . " [my emphasis].[22] My objection is to the word 'from': it should be 'to' on the construal of the justification of empirical knowledge which I have in mind. Let me explain the distinction. Bonjour is thinking of foundationalism on the model of an axiomatic system, such as, for example, Euclidean geometry.[23] On this model, the axioms are the

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[21] Bonjour, Structure, 17.

[22] Ibid., 30. See also Laurence Bonjour, "Can Empirical Knowledge Have a Foundation?" American Philosophical Quarterly 15 (Jan. 1978), 5.

[23] This same interpretation of foundationalism is given by Nicolas Rescher, The Coherence Theory of Truth (Oxford, 1973), 207.

"foundations" and the theorems are the "superstructure." If applied to empirical knowledge, this position would require the following reasoning. Suppose we are talking about how something appears, using the form 'D appears F to S', then, on Bonjour's construal of "foundational" justification, S can infer from 'D appears F' to 'D is F' or to 'D will appear G'. But this formulation is ambiguous. (i) Either we are talking here of an Aristotelian inference in the sense of it being mediated by a premise, or (ii) a Humean inference, i.e., a causal association between 'D appears F' and 'D is F'. If it is an Aristotelian inference, then we need a mediating premise, something like 'If D appears F under normal conditions to normal observers, then it usually is F'. But if this is the line of reasoning required, then obviously other empirical knowledge is being presupposed; namely, that the conditions and the observer are normal. This interpretation of foundationalism, obviously won't do since it requires other empirical knowledge.

The other line of reasoning (ii), would have us go directly from 'D appears F' to 'D is F' or to 'D will appear G'. But if there are no mediatory premises (as is assumed), then these are non-rational events which we find ourselves suffering.

Bonjour seems to have the latter line of reasoning in mind, and this sort of inference--a Humean inference--is, as Sellars would say, a non-epistemic fact. And in that case, it cannot serve as an epistemic foundation.

The alternative idea of justification to Bonjour's which I have in mind is based on an inference _to_, not _from_, an appearance. In this sense, beliefs about how one is appeared to can be used for confirmation or verification. And if we use the hypothetico-deductive model[24] for this kind of justification (i.e., confirmation or verification), then the situation is one in which we have as premises a lawlike statement and a statement of the initial conditions, and from these we deduce an appearance statement:

Lawlike statement
Observation reports (initial conditions)
Therefore: Appearance statement

If the deduced appearance statement is true, then assuming other truths, the basic (appearance) statement confirms to some degree the truth of the premises. From a logical point of view, the relation of the foundational basic empirical statement to that which it supports is: that which is supported entails the foundation, and not the converse.[25]

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[24] See Carl Hempel and Paul Oppenheim, "Studies in the Logic of Explanation," _Philosophy of Science_ 15 (1948): 135-75.

[25] I mean this model to include a statistical syllogism as a species.

On this analogy, perceptual knowledge about physical objects is taken to be a hypothesis, which together with other information entails a statement about how things will appear. And it is the entailment from the perception (as a hypothesis) to the appearance which partially justified perceptual knowledge. It is the logic of this situation which was in dispute, for example, in the debate between Chisholm and Lewis,[26] and is the relevant kind in the question of empirical foundational justification.[27] To ignore this understanding of foundationalism is to attack either some historical position or a straw man.

Second, Bonjour's (F-b) says too much by writing "all justification." The implication is that basic beliefs provide the sole type of justification for empirical knowledge. Perhaps the better formulation would be to say that basic beliefs are the ultimate necessary conditions for all empirical knowledge. And here we would make contact with something that was sought by the 'verifiability theory of empirical meaning'. After all a Foundationalist need not dismiss other modes of justification simply by insisting on a justification by empirical confirmation. As I pointed out, a foundationalist such as Chisholm insists on the criteria of consistency and congruence in addition to empirical confirmation.

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[26] Roderick Chisholm, "The Problem of Empiricism," reprinted in Perceiving, Sensing, and Knowing, ed. R. J. Swartz (New York: Anchor, 1965).

C. I. Lewis, "Professor Chisholm and Empiricism," reprinted in Perceiving, Sensing, and Knowing.

[27] A. J. Ayer, for example, has given up phenomenalism and defends realism on something like this reasoning in The Central Questions of Philosophy (Holt, Rinehart and Winston, 1973; New York: William Morrow and Company, 1975). See also his replies to critics in Perception and Identity, ed. C. F. Macdonald (Ithaca: Cornell University Press, 1979).

Clearly (F-b) entails (F-a), but not conversely. I think it suffices to be a non-foundationalist by simply rejecting thesis (F-b). We may then view non-foundationalism to be Weak if it also accepts thesis (F-a), or as Strong if it also rejects thesis (F-a). For example, a Weak non-foundationalist might reject (F-b) in favor of:

> (b′)that it is these "basic beliefs" which are the ultimate source of some justification for all of empirical knowledge.

My concern is not with the structure of a foundationalist view, i.e., thesis (F-b) or (F-b′), but only with thesis (F-a), which is compatible with both foundationalism and non-foundationalism. However the denial of (F-a) is incompatible with any version of foundationalism. So a good argument against (F-a) is ipso facto a good argument against foundationalism.

Let us call empirical beliefs formulated by (F-a) 'basic empirical belief'. Note that according to (F-a) basic empirical beliefs are justified either inferentially or noninferentially, and are not justified by other empirical beliefs.

Is there a way to further characterize these basic empirical beliefs? On Sellars' construal, basic empirical beliefs must be directly (non-inferentially) apprehended, i.e., spontaneously suffered, and presuppose "no knowledge of other matter of fact, whether particular or general."[28] If we combine Bonjour's and Sellars' understanding of basic empirical beliefs, we get the following formulation:

(BEB) if p is a basic empirical belief, then

- (i) p is caused noninferentially,[29] and
- (ii) p is justified either inferentially or noninferentially, and
- (iii) p is not justified by other empirical beliefs.

If we are to include traditional discussions under this formulation, then I think we have to quickly make some verbal bridges. In this formulation, the 'noninferential' in (BEB-i) is to be taken as equivalent to the 'directly apprehended', to the 'intuited', and to the 'given'.

Let me backtrack a bit because there is ambiguity in Bonjour's formulations. In (F-a), immediate (intrinsic) epistemic justification is characterized as excluding inferential or other epistemic dependency on other _empirical_ beliefs. This requires

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[28] Sellars, "Philosophy of Mind," 164.

[29] Since for Sellars an inference is a type of causal relation, it is necessary to distinguish an inferential cause from a non-inferential cause. See above the chapter on language and thought.

> (a′) an exclusion of all dependency (inferential or not) on other empirical beliefs, particular or general.

But elsewhere he writes that weak foundationalism "holds that there are basic beliefs having some degree--though a relatively low one--of _noninferential_ epistemic justification" [emphasis added].[30] Now this entails

> (a′′) an exclusion of any kind of inferential dependency on any other belief whatever.

If Bonjour means to hold (a′′), then he is denying our (BEB-ii). In that case, (BEB-ii) would have to be modified to read:

(ii′) p is justified noninferentially.

## IV. EXTERNALIST FOUNDATIONALISM

Accepting (ii′), still leaves room for the foundationalist to maneuver. This move, it seems, must be toward what is called an Externalist Foundationalism: a position held, by among others, D. Armstrong, F. Dretske,

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[30] Bonjour, _Structure_, 28.

Alvin Goldman, R. Meyers, and W. Alston.[31] The difference between Internalist and Externalist justifications of knowledge hinges on whether 'justified' is understood as 'justified by what I am aware of' or as 'justified by the circumstances which I may not be aware of', respectively. Since some of these circumstances may be reliable causal chains, the label Causal Theory of knowledge is an apt characterization of such an Externalist position.

W. Alston, for example, argues for an Externalist justification of knowledge as better fitting the ordinary use of the term 'knowledge', as when we attribute knowledge to animals, children, and non-reflective adults. Bonjour argues against this view.[32] Both agree that knowledge is justified true belief, but Alston uses the word 'justified' as meaning 'justified internally or externally', while Bonjour uses the word in the sense of 'justified internally' only. Alston, in his defense, offers examples where there is only external justification, and appeals to ordinary language and practice in calling such cases instances of knowing; commenting, "If terms like 'knowledge' are confined to the cognitive achievements of critically reflective subjects, we shall have to find a new term for the territory in its full extent";[33] while Bonjour, I take it, would dismiss the authority of ordinary language and practice, and refuse to describe such cases as instances of knowing. At best their disagreement is a normative one concerning the benefits of using 'knowledge' in these respective ways. But I am not interested is this kind of dispute. These seem to be simply different concerns based on different presuppositions. So, I will restrict my discussion to an exploration of the ramifications of assuming the Internalist view of knowledge, which means working with (BEB-ii) rather than (BEB-ii').

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[31] David M. Armstrong, Belief, Truth and Knowledge (Cambridge, 1973).
Fred Dretske, Seeing and Knowing (Chicago: University of Chicago, 1969).
R. G. Meyers, "Sellars' Rejection of Foundations," Philosophical Studies 39 (1982): 61-78.
Alston, William P., "Two Types of Foundationalism," Journal of Philosophy 73 (1976) 165-185.

[32] Laurence Bonjour, "Externalist Theories of Empirical Knowledge," in Midwest Studies in Philosophy, vol. 5, Studies in Epistemology. eds. P.A. French, T.E. Uehling, and H.K. Wetstein (Minneapolis: University of Minnesota Press, 1980): 53-73.

## V. PSEUDO AND GENUINE FOUNDATIONALISM

But before I go any further I want to make an important distinction concerning the objects of basic empirical knowledge. There are two candidates which are normally considered: physical objects and appearances (percepts, sensings, sense data). I will call the view which takes reports about physical objects to be basic 'Pseudo-Foundationalism', and the view which takes reports about appearances to be basic 'Genuine Foundationalism'.

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[33] Alston, "Immediate Knowledge," 85.

Pseudo-Foundationalism, as I use the phrase, is the claim that reports about physical objects (i.e., observation reports) are the foundations of knowledge. The attack against Foundationalism is in many cases really an attack against Pseudo-Foundationalism. This is true, specifically, of Sellars' attacks. An example which Sellars gives is of a report that there is something green in front of him. Such a report, argues Sellars, cannot be foundational because it presupposes other empirical knowledge. Specifically, it presupposes the general knowledge that things have the colors they seem to have under normal illumination, it presupposes the particular knowledge that the illumination is now normal, it presupposes the general knowledge that things have the colors they seem to have to normal observers, and it presupposes the particular knowledge that I know that I am at this moment a normal observer. Any report, then, such as the seeing of something being green satisfies requirement (BEB-i), but not (BEB--iii). And it is precisely Sellars' argument that observation reports about physical objects, because they do not satisfy the requirements of (BEB), cannot be foundational. Such reports presuppose general and particular empirical knowledge about the conditions of the person making the report and about the context in which the report is made.

I am satisfied by this argument, and believe that Pseudo-Foundationalism is false. But if this argument against Pseudo-Foundationalism is accepted, and no other kind of justification for empirical knowledge is offered, then it seems to entail a dilemma. If knowledge claims about physical objects presuppose particular and general empirical claims, these in turn require further justification of the same sort, and these in turn other empirical justifications. This seems to entail either an infinite regress, a knowledge of everything, or a circle of justification.

## A. GENUINE FOUNDATIONALISM

Genuine Foundationalism, by contrast, must minimally claim that the basic empirical beliefs are expressed by, what I will call, 'phenomenal' reports--what Lewis called 'expressive language', and what Chisholm means by 'noncomparative appear statements', and what Moore, Russell, Broad, Ayer, Price, and, more recently, Frank Jackson call reports about 'sense data', 'sensa', or 'qualia'.

Sellars' position is that the required sorts of phenomenal reports are not available as analyses of claims about the observation of physical objects. But Sellars concedes counterfactually that

> as long as looking green is taken to be the notion to which being green is reducible, it could be claimed with considerable plausibility that fundamental concepts pertaining to observable fact have that logical independence of one another which is characteristic of the empiricist tradition.[34]

Sellars, I take it, is admitting that if (counterfactually) phenomenal reports are entailed as analyses of reports about physical objects, then they can serve as foundations of empirical knowledge.

One philosopher who does seem to believe in the availability of phenomenal reports is V. W. O. Quine. He holds that empirical knowledge is justified by 'observation sentences' of which some 'occasion sentences' have direct 'stimulus meaning'. He writes:

> Thus they are just the sentences on which a scientist will tend to fall back when pressed by doubting colleagues. Moreover, the philosophical doctrine of infallibility of observation sentences is sustained under our version.[35]

My justification for the availability of phenomenal reports is given in the chapter on perception. Here I assume that they are available. But the discussion which follows can no longer be a confrontation with Sellars, since he rejects the assumption that phenomenal reports are available. However, it has been overlooked by Sellars' sympathizers that Sellars, in the passage quoted, had made the concession that it phenomenal reports were available, they would provide foundations for empirical knowledge. Heedless of this concession, they have tried to muster arguments from Sellars against the foundational character of phenomenal reports--as if they were available. But given Sellars' concession, he could not possibly agree with such arguments assembled in his name.

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[34] Sellars, "Philosophy of Mind," 144, #19.

[35] W.V.O. Quine, Word and Object (Cambridge, Mass.: M.I.T. Press, 1960), 44.

As an example of this misuse of Sellars, consider K. Lehrer's examination of Chisholm's claim that appearance statements (in the non-comparative sense) constitute the foundations of empirical knowledge. First, he grants Chisholm the availability of such statements: "We agree with Chisholm that there is such a thing as a non-comparative use of words."[36] Second, he claims that in describing one's state by using non-comparative appearance words, such language entails "the information needed to enable one to tell such a state from another."[37] Third, he concludes that a non-comparative use of words requires "independent information." Fourth, he says that this argument is similar to one used by Sellars.[38]

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[36] Keith Lehrer, Knowledge (Oxford: Clarendon Press, 1974), 109.

[37] Ibid., 110.

I don't know if his argument is sound, but it is not (relevantly) similar to Sellars' in the cited passage. First, although Sellars recognizes non-comparative uses of appear words, he does not accept the adverbial analysis given to them by Chisholm. Nor does Sellars accept the phenomenological availability of adverbial states as analyses of perceptual reports, as does Chisholm. In any case, in the cited passage, Sellars is considering colors of physical objects, not of sensorial phenomena, as does Lehrer.[39]

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[38] Ibid. He cites Sellars' "Philosophy of Mind," 146-7, #18.

[39] As to his argument, Lehrer seems to think that having a concept of an adverbial state, such as being appeared-to-redly, entails "independent information." And he uses the implicit principle that if any claim entails "independent information," then that claim is corrigible.

I am unable to assess this reasoning, because I don't know what he means by his claim that being appeared-to-redly entails independent information. This is a problem because I cannot figure out how Lehrer would distinguish "dependent" from "independent" information--especially since he classifies semantical information as "independent".

For example, suppose I say 'This is red'. On my rendition of the semantics involved, this statement depends on understanding 'This is not not-red' and 'This is not blue', and such. On Lehrer's view, this kind of semantical knowledge apparently is to be understood as independent information.

If Lehrer's point is that all linguistic information is independent information, then my position viz a viz this is that there is foundational pre-linguistic information of being appeared-to-redly which does not entail independent information.

## 1. JUSTIFICATION OF PHENOMENAL BELIEFS

Before I discuss the justification of phenomenal beliefs, I would first like to make a distinction between a belief about phenomena (sense data, sensa) and a phenomenal (non-parroting) report. The belief could exist without the report, but not conversely. And I immediately concede that linguistic errors are possible in making a report. So the issue must center on the availability of basic empirical beliefs, and not on linguistic reports.

In discussing the foundations of empirical knowledge, it is not necessary to claim that a specific basic empirical belief is certain, only that most of them have to be true. And if I know that most of them are true, then I may accept any specific basic empirical belief with confidence.

Given such a weakening of the requirement for foundationalism, Bonjour correctly reconstructs any defense of basic empirical beliefs as requiring the following statistical syllogism:

(JBB)

(1) Belief B has feature F.

(2) Beliefs having feature F are highly likely to be true.

Therefore, B is highly likely to be true.[40]

Let us concentrate on the first premise. It is clear from Sellars' criterion that a basic empirical belief must have as the feature F the properties (BEB-i) and (BEB-iii). (BEB-i) alone is not sufficient because any belief that we find ourselves having passively can have that status, including beliefs about observations of physical objects. But by criterion (BEB-iii), observational reports must be excluded as foundational. This is shown by Sellars' argument against a version of, what I have called, Pseudo Foundationalism. What other feature, then, is it necessary to add to (BEB-i) and (BEB-iii), if any, to have a viable form of foundationalism? The classical defenses of foundationalism have varied according to how F in (JBB) was interpreted. According to Bonjour, "[Basic beliefs] have been claimed to be not just adequately justified, but also infallible, certain, indubitable, or incorrigible."[41] The conclusion reached by Bonjour and others is that, as a matter of empirical fact, no phenomenal report is free from possible error. I accept such a conclusion. And my reason is simply that as an empirical fact, it is possible to suffer a momentary mental dysfunction. And such a mental dysfunction could in principle be objectively detected if a mind-brain correlation is assumed. Let me explain. A correlation could in principle be set up between verbal reports expressing basic empirical beliefs and brain states, which in principle is detectable by a cerebroscope. Suppose the report was "This is red", but the correlative brain state was "This is blue." The conclusion could be drawn that a mental dysfunction occurred.

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[40] Bonjour, Structure, 31.

[41] Ibid., 26. A systematic attempt at distinguishing and criticizing these concepts appears in D. Armstrong's A Materialist Theory of Mind (London: Routledge & Kegan Paul, 1968), 100-113. And a comprehensively systematic approach is given by W. Alston in "Varieties of Privileged Access," American Philosophical Quarterly 8 (1971): 223-241.

It may be conceded that a person's sense perceptions are psychologically indubitable, but from this it does not follow, so the argument goes, that sense perceptions are certainly true.

Although I concede that phenomenal reports are not certain because of the possibility of overriding external criteria, I do not concede that phenomenal reports are ever uncertain because of internal evidence. In the following section I will focus attention on how the challenge to the certainty of appearances is made from internal considerations, and why it fails.

### a. NELSON GOODMAN ON PHENOMENAL REPORTS

We find the certainty of phenomenal reports challenged, for example, by Nelson Goodman in the following passage:

> But the judgment that I made a few moments ago that a reddish patch occupied the center of my visual field at that moment will be dropped if it conflicts with other judgments having a combined stronger claim to preservation. For example, if I also judged that the patch occupying the same region an instant later was blue, and also that the apparent color was constant over the brief period covering the two instants, I am going to have to drop one of the three judgments; and circumstances may point to the first as well as to either of the others. If a statement may be withdrawn in the interest of compatibility and [sic] other statements, it is not certain in any ordinary sense; for certainty consists of immunity to such withdrawal.[42]

Let us reformulate Goodman's problem as the following inconsistent triad:

(1) At time $t_1$ I ostensively perceive x to be red.

(2) At time $t_2$ I ostensively perceive x to be blue.

(3) At time $t_3$ I judge that the color of x at $t_1$ was the same as at $t_2$.

Goodman's point is that consistency requires that at least one of these judgments be dropped, and that it is possible to drop any one of them. His point is simply that despite the existence of [psychologically] indubitable sense perceptions, if these sense perceptions are not consistent with other claims, then we may regard an "indubitable" sense perception to be false. Hence the indubitable and the certain do not coincide.

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[42] Nelson Goodman, "Sense and Certainty," in Problems and Projects (New York: Bobbs-Merrill Co., 1972), 60-61.

## (1) CRITICISM OF GOODMAN

Goodman assumes that it is possible to reject any one claim of the triad. But is this true? I don't think so. Goodman's triad is badly constructed. First, note that all three claims are objective claims. The first two speak of how one and the same thing (the patch) appears. Report (2) is dubitable in claiming that it is the same patch that appeared in (1). Second, if these were sense data reports then they would have to be put in the form that something (unspecified) appears as a red patch. If we reconstruct Goodman's example in terms of expressive reports, it would have to be formulated as something like:

> (1′) At time $t_1$ I ostensively perceive something x to be a red patch.
>
> (2′) At time $t_2$ I ostensively perceive something y to be a blue patch.
>
> (3′) At time $t_3$ I judge that at $t_1$ and $t_2$ I perceived one and the same thing, that $x = y$, and that its color at $t_1$ was the same as at $t_2$.

And now only the first two claims are expressive reports, and are the only cases of indubitable cognitions. The last claim is one which the Sceptics would call a judgment, and which could be wrong. Third, the last claim relies on memory, and if expressed as an indubitable claim would have to be put as:

> (3′′) At time $t_3$ it seemed to me that at $t_1$ and $t_2$ I perceived one and the same thing, and that its color at $t_1$ was the same as at $t_2$.

But put this way, there is no longer any inconsistency. In (3′′) I am merely expressing how things seem to me now. And this is irrelevant to how things appeared before. My conclusion is that Goodman's triad relies on mixing appearance statements with objective claims. Goodman succeeds not in depicting that appearances are not certain, but only that objective judgments are not. Furthermore, Goodman has not shown how it is possible to withdraw an appearance report. He has missed a point about the nature of phenomenal reports--a point which did not escape Sellars--that they are logically independent of each other.

An argument similar to Goodman's against the indubitability of phenomenal reports is offered by Bruce Aune in Knowledge, Mind, and Nature.[43] We take as a subject of an experiment a person who claims to have very vivid (eidetic) imagery. Aune proposes that we let him study the following letter-square:

e m f

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[43] Bruce Aune, Knowledge, Mind, and Nature (New York: Random House, 1967), 34-35.

r z a
o w p

We then withdraw the square from his vision, and let him consult his image. We ask him to do three things: (1) Read the image left to right, top to bottom; (2) Read the image right to left, bottom to top; (3) We ask him whether the image changed between doing (1) and (2). Suppose to these he replies, respectively: (1′) e, m , f, r, z, a, o, w, p; (2′) p, w, o, r, a, s, f, m, e; (3′) The image did not change. There is a discrepancy between (1′) and (2′). Aune concludes that one of these three reports must be false. This is correct. But it does not refute the indubitability of phenomenal reports.

Aune′s error is the same as Goodman′s. Aune is mixing appearance statements with objective claims. (3′) should have read: (3′′) It seems to me that the image did not change. This is meant as a report of his psychological state at the time he is making it, and it is not to be construed as a report about objective facts.

If error is to be detected, as I see it, it cannot be on the basis of comparing phenomenal reports, which, if properly formulated, are independent of each other (as Sellars recognizes). The error has to be detected, as I suggested before, by correlating the phenomenal report with a brain state. Once such a correlation is established, then the criterion of a correct report will be the relevant brain state. And the issuance of an anomalous report will then be considered criteriological evidence of a mental dysfunction.

### b. MENTAL DYSFUNCTION

A challenge not only to the certainty of phenomenal reports, but to any report whatever, is the possibility of mental dysfunction. This challenge, as far as I know, was first used in epistemological discussions by Descartes, who posits an evil genius who is bent on deceiving me in such a way that I cannot in principle discover the deception. However, O. K. Bouwsma[44] disputes that a deception of this kind is possible.

To meet Bouwsma's challenge, we need to distinguish a weak and a strong sense of deception. The weak deception is the one that Bouwsma correctly analyses to be in principle detectable. This would be the case if, for example, the evil genius tries to deceive me with a papier mache world. Such a deception on close inspection, as Bouwsma points out, is revealed for what it is.

But there is a stronger sense of deception in which the evil genius perverts my cognitive functions in such a way that I make, among others, calculational and inferential errors. I am referring to the second-order or "metaphysical" doubts about the trustworthiness of our mental functions as, for example, in adding small integers. And this is the strong sense of deception, which amounts to mental dysfunction and perhaps insanity. Can I in principle detect this kind of deception?

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[44] O.K. Bouwsma, "Descartes' Evil Genius," Philosophical Review 58 (Jan. 1949): 141-151.

My immediate response is: Would it be coherent to speak here of a deception? It seems that if x is going to deceive y, x has to perform some action A, such that A causes y to have an erroneous belief B. Thus a deception presupposes a belief of some sort on y's part. But if the evil genius is causing a mental dysfunction in y, then it may not be proper to speak of having a belief to begin with. A deception through mental dysfunction--if the dysfunction is severe enough--may be an impossibility.

This kind of scepticism based on the possibility of mental dysfunction was something new for epistemology. I am not familiar with any such possibility being discussed by Descartes' predecessors nor by any of the other classical philosophers. However Descartes' gambit enters into the speculations of current philosophers. For example, Bruce Aune, who I take to be a Sellarsian disciple, writes:

> good reasons can actually be given for doubting the allegedly infallible character of immediate awareness . . . Consider, first, the verbal behavior of hebephrenic schizophrenics . . . Verbally, at least, these people are totally confused. Is there any

> reason to think that their thoughts are less chaotic than their words?"[45]

I have no doubt that these people suffer mental dysfunction. But the curious question is: Why did most of the great classical philosophers fail to discuss the machinations of Descartes' evil genius or its analogue of mental dysfunctions?

## (1) PRESUPPOSITION OF MENTAL HEALTH

The Cartesian problem of the possibility of mental dysfunction was never seriously entertained because, I believe, it was taken as obvious that philosophical reflection is done on the assumption that the philosopher who is speculating is not only sane but also quite rational. Even Descartes himself, while recommending his own philosophy, qualifies his remarks by saying "there are truths that can be known in every matter sufficiently to satisfy fully the curiosity of healthy minds" (italics mine).[46] A similar caution is introduced by Chisholm, who writes: "We may suppose, once again, that we are dealing with a rational person" (italics mine).[47]

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[45] Bruce Aune, Knowledge, Mind and Nature, 33.

[46] Rene Descartes, "Meditations on First Philosophy," in The Philosophical Works of Descartes, trans. E.S. Haldane and G.R.T. Ross, vol. 1 (Cambridge: Cambridge University Press, 1967), 307-308.

Does this have any bearing on the indubitability of phenomenal beliefs? If the question is, "Can I judge that you are wrong in your indubitable claims?" then the answer is: yes. I can always find you to be mentally insane. But the question can also be, "Can I judge myself wrong about indubitable claims?" and here the answer assumes complexity for the following reasons. What must be the case about my mental powers and my claims to knowledge if this is a meaningful question for me? The answer that has to be given is this: If I am sane, then the condition of being sane is the inerrancy of most of my beliefs. Indeed it presupposes Kant's transcendental conditions of experience.

Descartes' cogito argument--transformed into the Kantian perspective--could be reinterpreted as an answer to this question of sanity. The answer would be that in order to appreciate the very question (which is a form of thinking), presupposes the possession of a coherent empirical conceptual framework. And to possess such a framework is to be sane.

The anti-foundationalist may want to identify the empirically given (or self-evident) with the incorrigible. I suggest that to do so is a mistake. The self-evident need not be incorrigible. It is better understood as a type of proposition which, when the burden of proof is taken into consideration in a particular sceptical inquiry, is to be presumed to be true. The self-evident is to be construed as relativized to a context of evidence, in which the circumstances of the person making a claim is taken into account..

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[47] Roderick Chisholm, Theory of Knowledge (Englewood Cliffs: Prentice-Hall, 1966), 44.

Something like this is suggested by Sellars himself: "Having [epistemic] authority . . . is a 'defeasible' or 'forensic' matter. One knows unless there are reasons to suppose one doesn't."[48] If S says that it is self-evident to him that p, and it is indubitable for him that p, this does not entail that p is true. There are two reasons I have for saying this: the first is that a person may misuse the sentence 'p'; the second is that the person may be insane. In his correspondence with Castañeda, Sellars wrote:

> let me remind you that to know (by seeing) that there is an object over there which is green and rectangular on the facing side involves background knowledge that the circumstances of perception are normal. I wish now to emphasize that the phrase 'circumstances of perception' must be construed to include not only the physical circumstances and the functioning of the sensory apparatus, but also the functioning of what might be called the 'conceptual apparatus' of the perceiver. Philosophers should pay

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[48] Wilfrid Sellars to Henri-Neri Castañeda, "Correspondence between Hector Castañeda and Wilfrid Sellars on Philosophy of Mind," unpublished (1961-1962), 35.

> more attention to the concept of madness, particularly its more extreme forms.[49]

Sellars' claim amount to this:

> 'S knows that there is a D, and that D is F' entails 'S knows that the physical, sensorial, and conceptual circumstances are normal'.

Note that what Sellars is talking about here are cases of perception of physical objects and their properties. He is not talking about phenomenal reports. But obviously some of the considerations of talking about perceptual claims will have a bearing on phenomenal reports as well.

Sellars claims that justification of knowledge claims requires knowing that the physical, sensorial, and conceptual conditions are normal. To know these things presupposes that such knowledge is possible. I will assume that such knowledge is possible for physical and sensorial normality, but it is not clear to me what he has in mind for conceptual normality. Sellars suggests that philosophers pay attention to the concept of madness, particularly the more extreme forms. But in view of the writings of Thomas Szasz, especially his The Myth of Mental Illness,[50] we must be cautious here. Much of what is considered mental illness may be abnormal--though, under the circumstances, suitable--coping mechanisms. I want to leave such cases aside.

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[49] Ibid., 31.

[50] Thomas Szasz, The Myth of Mental Illness: Foundations of a Theory of Personal Conduct (New York: Hoeber-Harper, 1961).

Let us concentrate rather on extreme forms of dysfunction of the conceptual apparatus, such as Aune had in mind, namely hebephrenic schizophrenia, or Wernicke's aphasia. These are cases in which the conceptual apparatus is chaotic. If this is what Sellars has in mind, then he may be thinking of the dysfunction of the necessary conditions for the existence of language and conceptual thought, which for Sellars are the abilities to make language entry transitions, intra-language transitions, language exit transitions, and the possession of auxiliary positions. I assume that for Sellars there are analogous distinctions for thoughts. Now any of these may be disrupted either singly or jointly. And perhaps Sellars is getting at the idea that the most important of these functions is the intra-language inferential process. If this process completely fails, then we have something like hebephrenic schizophrenia or Wernicke's aphasia. But Sellars probably would not include these as cases of the sort of conceptual dysfunction that can be detected by the person suffering them.

So what would count as a case of a conceptual dysfunction that is detectable? He must be thinking primarily of the other linguistic and thought functions (transitions). For example, it is possible that the intra-linguistic inference and language exit patterns are relatively coherent, but the language entry apparatus becomes abnormal--resulting in an inability to recognize, identify, or name things, the so called 'agnosia'. These vary from the inability to recognize colors, musical sounds, shapes, or faces to the inability to recognize various physical objects.[51] Related to such failings are various forms of amnesia. Also, the thought-language connection may fail as in aphasia, or the ability to carry out actions may fail (apraxia). There is a host of such separately identifiable functions that may fail. What is significant is the way such failures are connected or disconnected with each other. For example, the thought-language connection may fail at either end. In Broca's aphasia or anomia, there is language failure without significant thought failure; whereas in Wernicke's aphasia the language function is preserved to some extent but without coherent thought.

Given this kind of clinical data, can a person know that he is conceptually dysfunctional? The answer is: yes. The obvious cases are those of failure to recognize or name objects or events, or where hallucinations occur. People suffering anomia, amnesia, or agnosia may be aware of their affliction, as may people who hallucinate. Also those who suffer Broca's aphasia may be aware of their debilities.[52] What about people suffering intra-linguistic dysfunctions? Here there seems to be room for various possible shortcomings, ranging from failure to understand, or a failure to follow an argument; to fallacious reasoning and deluded beliefs. Can a person be aware of such shortcomings? Yes, from external evidence or introspectively, provided he can have the appropriate meta-thoughts. But, as Sellars put it: "To lose the tendency to have appropriate meta-thoughts is to cease to be rational or to lose one's mind."[53] What is Sellars getting at with the requirement of meta-thoughts? Sellars thinks the following:

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[51] Howard Gardner, The Shattered Mind (New York: Alfred A. Knopf, 1974), ch. 4.

> To think
>     I have the thought that it is raining
> Is to presuppose that one's conceptual apparatus is working properly. And, since the proper working of one's conceptual apparatus involves . . . reacting to having MO [meta-thought] when (*ceteris paribus*) and only when one has O [thought], one is, if the presupposition is correct, in a position to make the translevel inference.
>     I am under the impression that I have the thought that-p.
> So, I have the thought that-p.[54]

Castañeda objected that the requirement of having a meta-thought to justify a thought would lead to an infinite regress. To this Sellars replied: "I have never claimed that to have direct noninferential knowledge one must actually draw a translevel inference. I have simply said that one must be able to draw it."[55] The key point is that to have a meta-thought that one is having a though of some type is to presuppose that one's conceptual apparatus is working properly. And "To lose the tendency to have appropriate meta-thoughts is to cease to be rational or lose one's mind."[56]

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[52] Ibid., 397-400.

[53] Sellars to Castañeda, 19.

[54] Ibid., 31-32.

It seems that this follows as a corollary from Sellars' description of formal and material principles as occurring in a meta-language. To lose the ability to have meta-thoughts would be to lose a necessary condition for a conceptual language. It is always possible that no matter how things seem to me, I am from an external point of view insane. But in an extreme case I cannot know that I am. It may be appropriate to include in the concept of insanity either the inability to understand what insanity is or the inability to apply such a concept to oneself. The only attitude in view of this concept of insanity is to assume that one is sane. One mark of sanity, for those who can read and understand these words, is that in thinking that they understand, they are sane.

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[55] Ibid., 36.

[56] ibid., 19.

Speaking more specifically, anyone who can even raise the question of their own sanity in an epistemological inquiry must be presumed to be sane. Chisholm, for example, as I have already mentioned, in his discussion of the justification of knowledge not only presumes sanity, but rationality: "We may suppose, once again, that we are dealing with a rational person."[57] Does Sellars disagree? Not at all: "in the absence of particular reasons for thinking that something has gone wrong, we are entitled to suppose that our conceptual machinery is functioning properly."[58]

### c. TRANSCENDENTAL ARGUMENT FOR BASIC EMPIRICAL BELIEFS

Sellars' early essays are attempts to specify the necessary conditions for empirical knowledge. He looks for guidance to Carnap's work in syntactics and semantics, which specified the formal conditions for mathematical languages. In order to include normative formal conditions for empirical languages of the natural sciences, Sellars expands the syntactical and semantical metalanguage to include a 'pragmatics'. This requires answering the neo-Kantian question: How is an empirical language possible?

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[57] Chisholm, Theory of Knowledge, 44.

[58] Wilfrid Sellars, "Some Remarks on Kant's Theory of Experience," in Essays in Philosophy and its History (Dordrecht: D. Reidel, 1974), 60.

His answer is to expand on the formation and transformation rules to include what he called 'conformation rules', which he later called, following Carnap, 'P-rules', and which he later preferred to call 'material rules of inference'. Of course, the use of material rules of inference presupposes other concepts such as 'meaningful', 'verified', 'confirmed', 'true', and so on. And the normative study, Pragmatics, was intended to formulate in a metalanguage the necessary conditions for an empirical language. Suppose we spell all of this out and the result is a schema for a possible empirical language. We must remember that such a conception is arrived at through an analysis of the concept of an empirical language: it is an a priori concept of an empirical language--which is to say that Empiricism is an a priori concept. The concept of an empirical language is governed by the a priori requirements of consistency, coherence, applicability, and adequacy (as Whitehead formulated his requirements for cosmology).[59]

Suppose now that we have this conceptual structure and we are seeking the tokens of this type. Prima facie two answers are possible: the empirical languages are tokens of our pure pragmatics; or some experiences are themselves the tokens. Sellars' position here is to accept the first possibility and to reject the second one. But Sellars' rejection would be one of degree only. He would not deny that the 'language of experience' is analogous to a conceptual (conventional) language. But to recognize that such experiences are tokens of a type, would require the concepts of tokens and types; and these are available only through a conventional language. The upshot is that though such a pre-linguistic symbolism may approximate a language, yet it lacks the concepts to reflectively appreciate this fact. So to properly speak of 'knowledge' requires being is a full-blown language.

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[59] Alfred North Whitehead, Process and Reality: An Essay in Cosmology (New York: Macmillan Company, 1929); reprint (New York: Harper Torchbooks, 1960), 4-5.

The Foundationalism/Non-Foundationalism issue, as I have defined it, rests on the question whether there are basic empirical beliefs such that their acceptance as being true or false does not rest on the truth or falsehood of other empirical beliefs--general or particular.

Sellars' ultimate approach to this problem is from a neo-Kantian perspective, which relies on a transcendental argument of how a Pure Pragmatics is possible. Sellars, like Kant, is looking for the conditions for the possibility of empirical knowledge. His reasoning is that the possibility of empirical knowledge requires the possession of a language.[60] And to possess a language requires the possession of propositions which play roles in the language entry-inference-departure roles. In this structure, the language-entry propositions (observation reports) are generically foundational in the sense that inferences and intentions (language-departure propositions) are ultimately concerned with observational propositions. With this in mind, he wrote:

> There is clearly some point to the picture of human knowledge as resting on a level of propositions--observation reports-- which do not rest on other propositions in the same way as other propositions rest on them.

But went on to add,

> On the other hand, I do wish to insist that the metaphor of 'foundations' is misleading in that it keeps us from seeing that if there is a logical dimension in which other empirical propositions rest on observation reports, there is another logical dimension in which the latter rest on the former.[61]

And what is this "another logical dimension"? It is simply the idea that isolated observation reports are not sufficient to provide either concepts, or language, or empirical knowledge. As he put it, "We have to be in this framework

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[60] From the Kantian perspective, which Sellars adopts, the question of epistemology is: How is knowledge or epistemology possible? And once the necessity of language is acknowledged for cognition, ". . . epistemology, in this context, becomes the theory of this [linguistic] functioning--in short transcendental linguistics." W. Sellars, "Some Remarks on Kant's Theory of Experience," in Essays in Philosophy and Its History (Dordrecht, Holland: D. Reidel, 1974), 59.

[61] Sellars, "Philosophy of Mind," 170.

[of entry-inference-departure transitions] to be thinking and perceiving beings at all," and then he adds "and acting beings."[62]

From the perspective of an explication of the concept of empirical knowledge, it is an analytic truth that there must be observation reports and that these must be conceptually connected to various other statements. To have the concept of an observational report entails the possession of a conceptual framework in which the observational report fits via inferential connections.

Can this transcendental reasoning meet Bonjour's strong requirement (JBB-i)? In formulating the foundationalist position as (BEB), we left open the following possibility:

(iv) p is justified by nonempirical beliefs.

And an a priori argument could supply such a nonempirical belief. One commentator, Robert Meyers, understood that an a priori argument is not ruled out by Sellars as a possible type of argument for the justification of basic empirical beliefs:

> Sellars does not say so explicitly, but it is clear that the only sort of presupposed knowledge the foundationalist rules out is empirical knowledge; a

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[62] Wilfrid Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Company, Inc., 1975), 345-346.

> priori presuppositions would be perfectly acceptable.[63]

In considering the possibility of an a priori argument, Bonjour simply writes, "it is hard to see how a particular empirical belief could be justified on a purely *a priori* basis."[64] He is correct in his scepticism about "particular" empirical beliefs, but such a scepticism should not be extended to "kinds" of empirical beliefs. He goes on to attribute an a priori justification of basic empirical beliefs to Lewis, Chisholm and Firth. Specifically, he attributes to them the belief that

> basic or foundational beliefs are warranted by virtue of possessing the conjunctive property [F] of (i) being confined in their subject matter to a purported description of my present experience, and (ii) being accepted by me now.[65]

Bonjour does not see how this is an a priori argument since this formulation implies two empirical claims. The first is that I do, in fact, have the belief B; the second that this belief B has, in fact, the property F. His obvious rejoinder to such empirical implications should be to demand justification for these two claims. But he draws back arguing,

> If the original issue is whether I am justified in holding a certain belief, then the raising of that

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[63] R.G. Meyers, "Sellars' Rejection of Foundations," *Philosophical Studies* 39 (1982), 64.

[64] Bonjour, *Structure*, 31.

[65] Ibid., 80.

> issue seems to presuppose that I do in fact hold it, so that it becomes inappropriate to demand justification for this latter claim.[66]

The result is that Bonjour is conceding a reflective knowledge of psychological states, such as knowing that I am in the state of believing that p. In fact he concedes that most of my beliefs about my psychological states must be presumed to be true. He calls this the 'doxastic presumption'.

In any case, he has not conceded that the empirical contents of beliefs have to be presumed to be generally true as well. In other words, he concedes that I can presume to know that I believe that p, but I cannot presume that p is true. And this is the sort of empirical knowledge which matters. Are there, then, a priori justifications for these?

One could propose the following seemingly a priori argument to satisfy Bonjour's demands. Let 'B' stand for some belief about the property of a physical object, such as 'I see that this physical object is red'. 'B*' stands for 'This is an observation report'. Substitute for (1) of (JBB) the claim:

(1') Belief B is a token of type ·B·.

and then change (2) to

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[66] Ibid., 81.

(2′) Beliefs which are tokens of type B* must be highly likely to be true (if there is to be empirical knowledge).

The conclusion is:

(3′) Therefore, B must be highly likely to be true (if there is to be empirical knowledge).

Premise (1′), I believe, must be granted: it is an instance of Bonjour′s doxastic presumption. It must be assumed that people are able to apply concepts to experience, if there is to be empirical knowledge.

Premise (2′), however, presupposes that ·B· can be true. How is this possible? On Sellars′ reasoning, this will be the case if the tokens of ·B· stand in a picturing relation to physical objects. Sellars puts this as: X is a reliable symptom of Y.[67] Thus if a person is to know that, for example, ′This is red′, he must also know that observing that ′This is red′ is a reliable symptom of the fact that indeed this is red under normal circumstances. In short, he must have knowledge of the following necessary truth that

x is red. iff .x would look red to standard observers in standard conditions

It seems that to be justified in claiming (2′), one needs not only general knowledge of this sort, but also the particular knowledge that the person himself and the conditions are indeed normal. This is to say that a person has observational knowledge if he is capable of such a trans--level inference. Bonjour takes this as the coup de grace for foundationalism:

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[67] Sellars, "Philosophy of Mind," 169.

> the most fundamental and far-reaching objection to foundationalism--namely that there is no way for an empirical belief to have any degree of warrant which does not depend on the justification of other empirical beliefs.[68]

To this line of reasoning, Castañeda pointed out to Sellars that this would involve an infinite regress. For example, to observe that this is red, would require the ability to know that the illumination was, for example, from sunlight. But to observe that the sun was shining would require other general and particular knowledge, and so on to infinity.[69]

Sellars answered that for a person to have observational knowledge he must be only capable of providing such additional knowledge, and not expressing it at the time of the observation.[70] Thus if Jones' claim to see that this is red is to count as knowledge, he need not at the time of the claim have the thoughts occur to him expressing general and particular knowledge, he simply must be capable of formulating such knowledge as justification. So the regress does not appear to be vicious.

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[68] Bonjour, Structure, 29.

[69] Castañeda to Sellars, 25.

[70] Sellars to Castañeda, 36. See also Sellars, "Philosophy of Mind," 169, #37.

Since making observation reports clearly implies having other empirical knowledge, the attempt to give an a priori justification fails for particular empirical claims. However, the a priori argument, according to Sellars, justifies the foundational status of observational reports of _one kind or another_. This is to say that the requirement of observational reports does not give to any particular set of observational reports an incorrigible or immutable status. To believe otherwise is to embrace, according to Sellars, a form of the Myth of the Given. Here is how Sellars put it:

> To reject the myth of the given is to not commit oneself to the idea that empirical knowledge as it is now constituted has no rock bottom level of observation predicates proper. It is to commit oneself rather to the idea where even if does have a rock bottom level, it is _still_ in principle replaceable by another conceptual framework in which these predicates do not, _strictly speaking_, occur. It is in this sense, and in this sense only, that I have rejected the dogma of given-ness with respect to observational predicates.[71]

I believe Cornman got it right when he wrote:

> Sellars is opposed to observation statements being given and thus unalterably at the foundation . . . But none of this requires that he reject foundationa-

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[71] Wilfrid Sellars, "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation," in _Philosophical Perspectives_ (Springfield, Illinois: Charles Thomas, 1967), 353.

> lism. Indeed, his rejection of "the" given is not a rejection of foundationalism.[72]

And indeed it is a Sellarsian faith that our present observation reports can be replaced by theoretical reports of an ideal science.

> He [the philosopher] must also envisage the world as pictured from the point of view--one hesitates to call it Completed Science--which is the regulative ideal of the scientific enterprise. As I see it, then, substantive correspondence rules are anticipations of definitions which it would inappropriate to implement in developing science, but the implementation of which in an ideal state of scientific knowledge would be the achieving of a unified vision of the world in which the methodologically important dualism of observation and theoretical frameworks would be transcended, and the world of theory and the world of observation would be one.[73]

I challenge this thesis in my chapter on Animal Realism.

But since it can be presumed that our empirical knowledge does rest on observation reports, cannot we also presume that most of these reports are reliable (if we are to have empirical knowledge)? And if this is the case, then it also seems reasonable to hold each observation report to be reliable unless there is reason not to do so. Chisholm, for one, believes such an approach is reasonable:

> This is the principle that anything we find ourselves believing may be said to have some presumption in its favor --provided it is not explicitly contradicted by the set of other things that we believe. The principle may be thought of as an instance of a more general truth--that it is reasonable to put our trust

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[72] Cornman, "Empirical Knowledge," 296.

[73] Wilfrid Sellars, "Theoretical Explanation," in Philosophical Perspectives, 335.

> in our own cognitive faculties unless we have some positive ground for questioning them.[74]

This seems to be acceptable to Sellars on transcendental grounds, and constitutes, I believe, a very weak foundationalism--but foundationalism, nonetheless.

## (1) PHENOMENAL REPORTS

But notice that Sellars' justification of empirical knowledge by a trans-level inference applied only to observation reports _as a class_ about physical objects. What about phenomenal reports?

I propose the following a priori argument to satisfy Bonjour's demands. Let 'B' stand for some _phenomenal_ belief about how one is appeared to, such as, "This looks red' ('this' is used demonstratively but indefinitely as to category; 'red' is used in a non-comparative, phenomenal sense). Substitute for (1) of (JBB) the claim:

(1*) Belief B is a token of type B*.

(2*) Beliefs which are tokens of type B* must be highly likely to be true (if there is to be empirical knowledge).

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[74] Roderick Chisholm, "A Version of Foundationalism," _Midwest Studies in Philosophy_ 5 (1980), 551-552.

(3*) Therefore, B must be highly likely to be true (if there is to be empirical knowledge).

Suppose we grant the existence of phenomenal reports (call them 'intuitions'), is there any further difficulty? Bonjour presents the following dilemma. The intuitions are either cognitive or not. If they are not cognitive, they cannot give nor receive epistemic justification. If they are cognitive, then they can give and receive epistemic justification. "In either case, such states will be incapable of serving as an adequate foundation for knowledge. This at bottom, is why the empirical givenness is a myth."[75]

We can answer Bonjour's dilemma by taking it by the horns. Bonjour is conflating two notions of 'epistemic justification'. There is empirical and there is a priori justification. My present contention is that there is an a priori justification, and that this is compatible with foundationalism.

If phenomenal reports were available for the justification of observational knowledge, then they would fall into the class of introspective reports, such as reports of thoughts and after-images. And what kind of justification does Sellars require for introspective reports? I believe he would accept the above transcendental argument with the following qualification:

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[75] Bonjour, Structure, 69.

> In the absence of facts about its occurrence which would make it non-authoritative (and these are of a limited and--in principle--ascertainable variety) it is authoritative. Having authority . . . is a 'defeasible' or 'forensic' matter. One knows unless there are reasons to suppose one doesn't.[76]

However introspective knowledge, for Sellars, is conceptually secondary, and presupposes knowledge of physical objects. But this is not an objection, since conceptual dependence is compatible with epistemic independence. So Sellars concedes that introspective knowledge has to be regarded as incorrigible:

> As in the case of our direct knowledge of our sensations and feelings, the incorrigibility [about thoughts] is in large part accounted for by the 'minimality' of the cognitive claim that is being made. There are no conceptual ways to go wrong, unlike the case of "There is an inkstand on the table".[77]

From this it is obvious that Sellars would consider that observational knowledge would have specific rather than generic foundations if it entailed phenomenal reports. This would be the case because phenomenal reports would be logically atomic--not requiring any other empirical knowledge for their justification, and they would be justified by the above transcendental argument. But Sellars denies that observation reports entail phenomenal reports; so this justification is otiose for Sellars.

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[76] Sellars to Castañeda, 35.

[77] Ibid., 8.

A philosopher who does use phenomenal reports as foundations of empirical knowledge is R. Chisholm. Phenomenal reports, for him, describe phenomenal properties, which are the proper and common sensibles of Aristotle. Let us refer to a phenomenal property by the letter 'F', then Chisholm's foundationalism can be formulated in the following way:

(1) I know that this is F because it appears F.

(2) It is directly evident that it appears F.

(3) I know that it is evident that it appears F because it does appear F.[78]

Sellars never confronts Chisholm directly on this kind of epistemic justification. The most extensive coverage is given in his "Structure of Knowledge," but here he simply points out that Chisholm talks about introspective reports as being 'directly evident' and goes on to discuss the issue of the 'indirectly evident'. Sellars must take this evasive tack because he denies Chisholm's presupposition (1) that observational reports entail phenomenal reports.

But step (3) in Chisholm's reasoning may be amenable to a Sellarsian treatment. In his Perceiving,

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[78] Chisholm, Theory of Knowledge, 32-33.

Chisholm's considers how a phenomenal appearance statement could be justified, and answers: "But if he wished to describe *his own* justification for asserting the appear statement, he could do little more than to repeat his statement."[79] He calls this "defense by repetition" of phenomenal reports.[80] In his *Theory of Knowledge*, Chisholm gives basically the same answer:

> To the question "What justification do I have for thinking I know, of for counting it as evident, that something now *looks* red to me, or *tastes* sour?" I could reply only by reiterating that something does now look red or taste sour.[81]

I have always wondered why Chisholm resorts to this argument, and despite such theological language as that appear statements are 'unmoved movers' or 'self-moving prime movers',[82] (3) seems to be an expression of a tautology. Bonjour seems to agree with my assessment when he comments, "that extremely paradoxical remark hardly constitutes an explanation."[83] I think one can do better than Chisholm in justifying phenomenal reports. There are at least two better ways to defend phenomenal reports. The first way is Sellars' transcendental defense of introspective reports along the lines I have already given. The second is the argument to the best explanation, which would run as follows. The explanation for why something appears F is simply that something does appear F. This looks exactly like Chisholm's formulation, but the meaning is different. Chisholm uses the formula as a reiteration of the original claim. My formula is not simply a reiteration but an appeal to the hypothesis that how things phenomenally appear is due to the existence of reified appearances or sense data. That Chisholm does not attach this meaning to his reiteration is obvious from his rejection of the sense-datum inference which my approach entails.[84]

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[79] Roderick Chisholm, *Perceiving: A Philosophical Study* (Ithaca: Cornell University Press, 1957), 62.

[80] Ibid., 62.

[81] Chisholm, *Theory of Knowledge*, 33.

[82] Ibid., 33.

[83] Laurence Bonjour, "Can Empirical Knowledge Have a Foundation?" *American Philosophical Quarterly* 15 (Jan. 1978), 10.

### d. CONCEPTUAL VS. NON-CONCEPTUAL REPRESENTATION

I believe that there is a way to bridge the gap between Sellars and Lewis-Firth-Chisholm about premise (1) of Chisholm's argument by using Sellars' distinction between Language, or L, and a Representational System, or RS. Suppose we identify Lewis' 'sense meanings',[85] Firth's ur-concepts,[86] Chisholm's 'phenomenal reports',[87] Everett Hall's 'natural language of perception',[88] and Romane Clark's 'sensuous judgments'[89] with an RS. All of these may, in a refined way, have the following theses in common with an RS: (i) propositional form, (ii) Humean inferences, and (iii) no logical connectives. I say in 'a refined way' because I am not clear that each of these authors sees the necessity of (iii) in their analogues of an RS. Clark is clear when he writes: "I do not think of the logical connectives as part of perceptual judgments. Certainly not on the primitive level of basic perceptions."[90] Lewis's concept of 'sense meaning' is hard to pin down. But a few things are clear. Sense meaning is prior to and independent of language,[91] even animals possess it,[92] and it requires anticipatory imagery.[93] These remarks suggest at least the acceptance of (ii). Lewis also suggests that sense meaning may be connected with Kant's 'schema'.[94] At this point there is a connection between Lewis and Sellars. In "The Role of Imagination in Kant's Theory of Experience," Sellars introduces the notion of an 'image-structure', 'sense - image', or 'image-model' which, according to Sellars, is the work of Kant's productive imagination. There is according to Sellars as 'image-model world'[95] prior to and independent of logical connectives (categories). A 'schema' for Kant, according to Sellars, bridges concepts and such image- models. A schema is the construction of an image-model by the productive imagination in accordance with a concept.[96] In saying this, Sellars may be in disagreement with Lewis over the interpretation of Kant. In any case, I think that both Sellars and Lewis agree that a schema is a recipe for construction of an image-model. Their disagreement, I suspect, is over whether there is a requirement for conceptual guidance. But that doesn't matter here, it suffices that Sellars acknowledges pre-conceptual image-models, which, as far as I can see, are the same thing as RSs.

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[84] See below my chapter on perception for objections to Chisholm's purported refutation of the sense-datum inference.

[85] C.I. Lewis, An Analysis of Knowledge and Valuation (LaSalle, Illinois: The Open Court Publishing Company, 1946), ch. 6.

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[86] Roderick Firth, "Reply to Sellars," Monist 64 (1981), 93.

[87] Chisholm, Theory of Knowledge, ch. 6.

[88] Wilfrid Sellars, "The Intentional Realism of Evert Hall," in Philosophical Perspectives.

[89] Romane Clark, "The Sensuous Content of Perception," in Action, Knowledge and Reality, ed. H.N. Castañeda (Indianapolis: The Bobbs-Merrill Co., 1975).

[90] Clark, "Sensuous Content," 126.

[91] Lewis, Analysis, 131.

[92] Ibid., 138-139.

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[93] Ibid., 134.

[94] Ibid., 134.

[95] Wilfrid Sellars, "The Role of Imagination in Kant's Theory of Experience," in Categories: A Colloquium, ed. Henry W. Johnstone, Jr. (Pennsylvania State University, 1978), 237.

[96] Ibid., 238.

## e. RECONCILIATION?

Now my attempt to reconcile Sellars with these other philosophers would take the form of reinterpreting Chisholm's

(1) I know that this is F because it _appears_ F.

where 'it _appears_ F' can be understood as 'I am rs-aware of an image-model rs-F'.[97] And if we generalize, we can formulate the thesis that a perception of a physical object entails an rs-perception of an rs-(physical object), which in turn entails an rs-awareness of an rs-appearance.

Would this be acceptable to Sellars? The answer is: no. His reason is this:

> although the objects of which we are directly aware in perceptual consciousness are image-models, we are not aware of them as image-models. It is by phenomenological reflection (aided by what Quine calls scientific lore) that we arrive at this theoretical interpretation of perceptual consciousness.[98]

Sellars apparently accepts an RS (image-model world) as a theory which _explains_ our perceptual knowledge, but not as an _analysis_ of it. Sellars is introducing two difficulties for a reconciliation. The first difficulty is that although in point of theoretical fact we do experience image-models, we do not experience them in propria persona[99] as image-models. The point of denying the propria persona principle is that physical objects or events are conceptually constituted by various logical and causal relations, and these are never given by any sense modality, but must be learned. Sellars' rejection of this principle is acceptable.

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[97] I am putting the 'rs-' prefixes to make sure that we don't confuse these analogous (truncated) pre-conceptual descriptions with their conceptual counterparts.

[98] Sellars, "Role of Imagination," 237.

The second difficulty for Sellars is that observational reports are not analyzable into, i.e., do not entail, phenomenal beliefs; rather, the image-world is accessible to phenomenological reflection. This is also acceptable. But Sellars seems to muddy the waters in this context by talking in the same breath about perceptual reflection and theory construction. When Sellars talks about theories he means postulational theory. I believe there is a difference between phenomenological reflection and theory construction. Sellars himself acknowledges this distinction when he writes:

> sheer phenomenology or conceptual analysis takes us part of the way, but finally lets us down. How far does it take us? Only to the point of assuring us that

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[99] The propria persona principle is the thesis that if something in fact (by theory) has categorical feature C, we must be aware of it as C.

> Something, somehow a cube of pink in physical space is present in the perception other than as merely believed in.[100]

When Sellars is doing phenomenological reduction, he is not theorizing. The trouble with the above reduction, however, is that it is not reductive enough. This was the point made by Firth in his reply to Sellars' Carus Lectures.[101]

If we made the reduction go further we would get something like Chisholm's analysis. To express the fact that we are dealing with a phenomenological reduction, let's modify Chisholm's formula

(1) I see that this is F because it appears F.

by expanding it to read

(1′)I see that this is F because I can perceptually reduce this to it appears F.

We can then agree with Sellars that (1) does not express an analysis; rather it expresses a phenomenological or perceptual reduction.[102] And if physical objects do entail (perceptually reduced) phenomenal reports, then empirical knowledge does have foundations.

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[100] Wilfrid Sellars, "Sensa or Sensings: Reflections on the Ontology of Perception," Philosophical Studies 41 (1982), 89, #26.

[101] Firth, "Reply to Sellars."

[102] See Roderick Firth, "Sense-Data and the Percept Theory," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New York: Anchor, 1965), 248.

# CHAPTER 8

# THE GIVEN

The linchpin of Sellars' materialistic system is his claim that the given (in some sense) is a myth. He is quite aware of the importance of his views on the given to the rest of his philosophy when he writes: "The views [about the myth of the given] I expressed are so central to my way of thinking that if they were to fall apart the result would be a shambles."[1] He is also aware of the importance of the given to most other philosophies. When he reflects on the history of philosophy, he finds that the belief in a given has been a pervasive presupposition:

> This framework [of the given] has been a common feature of most of the major systems of philosophy, including, to use a Kantian phrase, both 'dogmatic rationalism' and 'sceptical empiricism'. It has, indeed, been so pervasive that few, if any, philosophers have been altogether free of it; certainly not Kant, and, I would argue, not even Hegel, that great foe of 'immediacy'.[2]

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[1] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 3, #3.

[2] Wilfrid Sellars, "Empiricism and the Philosophy of Mind," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 127.

Most philosophers are faulted for embracing one or another form of the myth, and Sellars' own philosophical constructions are devised to skirt it.

The view that the given is a myth has been popularized by Sellars, and it may well be one of his distinct contributions to philosophy. This is acknowledged both by his sympathizers and critics. The following comment by Richard Rorty is probably shared by most students of Sellars: "Sellars's attack on the Myth of the Given seemed to me to render doubtful the assumptions behind most of modern philosophy."[3]

The function of the given, as Sellars understands it, is to provide a "foundation" for knowledge:

> the epistemological category of the given is, presumably, to explicate the idea that empirical knowledge rests on a 'foundation' of non-inferential knowledge of matter of fact.[4]

As an epistemological category, the given is meant to be a piece of elementary information playing an incorrigible evidential role in epistemic justification. But before I examine this role, we must be clear about the nature of the given.

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[3] Richard Rorty, Philosophy and the Mirror of Nature (New Jersey: Princeton University Press, 1979), xiii.

[4] Sellars, "Philosophy of Mind," 126.

## I. DISAMBIGUATION OF THE GIVEN IN SELLARS

When we look for a clarification of the concept of the given in Sellars, we do not get one clear unambiguous concept; but what amounts to a vacillation between a cluster of concepts. Something like this is admitted by Sellars: "in general, the scope of the concept of the given was ill-defined."[5] My first task, therefore, will be to distinguish the different senses of the "given" in Sellars' writing.

Two widely different treatment of the given occur first in dealing with types of judgments, and second with the nature of concept acquisition, which in its turn contains a further ambiguity. But despite these ambiguities, all the discussions about the given have relevance to the foundational theory of knowledge. Sellars, in talking about the given, has at least two targets in mind: he is interested in rebutting particular claims about the certainty of some judgments, and in rebutting claims about concept acquisition. There is thus this initial ambiguity in Sellars. Is the given a theory of concept acquisition or a theory of the justification of judgments? These two problems are, as I see it, independent. A thesis about concept acquisition may have no implications about the certainty or uncertainty of judgments. If some concepts are given, this may mean that they are either innate or abstracted; and if some judgments are given, this means that they are non-inferentially known in some way and are certain or not.

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[5] Sellars, "Carus Lectures," 3, #4.

Sellars position on these two issues is that no concepts are either innate or abstracted, and that no judgments are known with certainty. My position, by contrast to Sellars', is that there is a given in both these senses. The difference between us concerns the nature of cognition and its relation to a conventional language. Specifically the question before us is whether the possession of a conventional language is necessary to cognition. The superficial answer is that Sellars affirms this, and I deny it. It is a superficial answer because of the need to distinguish between rs-cognitions and conceptual cognitions. My claim is that conventional language learning presupposes a pre-conventional representational system (Lewis' 'sense meanings') which I have been abbreviating as RS. RS presupposes the existence of an innate capacity to abstract and to interrelate experiences. This is my alternative to Sellars' theory of concept acquisition. As concerns the given of judgments, this is a more complicated matter requiring, as I have shown, a transcendental argument. Put succinctly my claim is that rationality presupposes the reliability of some judgments. But, again, as I said, the two issues are independent. The first concerns the theoretical foundations needed to explain the possibility of learning; the second concerns the epistemic problem of justification of claims. If an RS exists--as Sellars has conceded in his latest writings--then it can provide an epistemic given, but not in the sense of self-justifying information, but in the sense of information that does not normally require justification, though which can receive a transcendental justification.

## 3 A. THE GIVEN IN JUDGMENTS: PARTICULARS OR FACTS?

Sellars understands a foundationalistic view of knowledge as entailing a belief in a non-inferential incorrigible type of knowledge. This type of knowledge has normally been identified with phenomenal knowledge. And if that is what the given is, then Sellars poses the following dilemma for any foundationalistic approach that relies on this type of given in knowledge. He says that either particulars or facts are given. If particulars are given, then

> (a) It is *particulars* which are sensed. Sensing is not knowing. The existence of sense data does not *logically* imply the existence of knowledge, or
> (b) Sensing *is* a form of knowing. It is facts rather than *particulars* which are sensed.[6]

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[6] Sellars, "Philosophy of Mind," 129.

My view is that alternative (a) does not provide a foundation to knowledge since sensing a particular is a non-epistemic occurrence. So if foundationalism is to be a viable possibility, some version of (b) must be defended. If 'S senses K' is to be an epistemic fact by implying 'S knows K' (in the so called knowledge by acquaintance), the sense of 'knows' in this context, Sellars states, must be stipulated so that, for example, 'S knows K' means 'S knows that this here now is K'. Sellars' position is that the given, if it exists as knowledge, must be a linguistically formulated self-justifying information, having the form 'S knows that this here now is K'. But, according to Sellars, there is no such linguistically formulated certain information; therefore, there is no given in this sense. On the other hand, if the given existed in some other way, it would be certain information occurring non-linguistically. And since it is impossible, for Sellars, that there be such information independent of language, the given, in this sense too, is a myth.

I am in agreement with the formulation as presented. But this formulation is misleading by talking about knowledge of kinds (sortals) and omitting talking about a perceptual knowledge of phenomenal properties and relations. Let us use '$P_{ph}$' for phenomenal properties, and '$R_{ph}$' for relational properties, then the foundationalist claims could be expressed as 'S sees that this here now is

$P_{ph}$′ or ′S sees that this here now which is $P_{ph}$ is next to that there now which is $P'_{ph}$′. And though these claims are expressed linguistically, they correlate to beliefs which occur non-conceptually--but representationally.

## 3 B. THE GIVEN OF CONCEPTS

At other times Sellars identifies the given with a view about concept acquisition. In formulating the common presupposition of Rationalism and Empiricism, he writes:

> Actually there are various forms taken by the myth of the given in this connection, depending on other philosophical commitments. But they all have in common the idea that the awareness of certain sorts -- and by ′sorts′ I have in mind, in the first instance, determinate sense repeatables--is a primordial, non-problematic feature of ′immediate experience′.[7]

and,

> Locke, Berkeley, and Hume . . . all take for granted that the human mind has an innate ability to be aware of certain determinate sorts -- indeed, that we are aware of them simply by virtue of having sensations and images.[8]

Sellars calls this position ′concept empiricism′, which consists of the following dogma:

(CE) All awareness of universals is derived from the awareness of instances.

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[7] Sellars, "Philosophy of Mind," 157.

[8] Ibid., 160.

Thus, for example, according to this dogma, a word such as 'red' is learned by associating it with an awareness of redness. His own alternative is called 'psychological nominalism', which, by contrast, consists of the thesis that:

> (PN) All awareness of sorts, resemblances, facts, etc,. in short all awareness of abstract entities--indeed, all awareness of even particulars--is a linguistic affair.[9]

Analogously to 'concept empiricism', Sellars could have coined the phrase 'concept rationalism' to label all those views which believe in innate concepts, such as the views of Descartes, Leibniz, Spinoza, and Kant. And by contrast to 'concept rationalism', he did write consistently with (PN) that "there is no awareness of logical space prior to, or independent of, the acquisition of a language."[10]

The common element of both 'concept empiricism' and 'concept rationalism' is the view that man possesses, as Richard Rorty put it, a mental eye through which the mind is impressed with empirical and abstract concepts. According to Sellars, the proponents of the given, have maintained that this ability to be conceptually impressed, "presupposes no learning, no forming of associations, no setting up of stimulus-response connections."[11]

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[9] Ibid.

[10] Ibid., 162.

[11] Ibid., 131.

I am in agreement with Sellars on all these points. We have to be cautious in understanding that the word 'awareness' is being used in the sense of 'conceptual awareness'. Once this is understood, Sellars' theses are all corollaries of what it means to have a concept.

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## C. FURTHER AMBIGUITY IN THE CONCEPT OF THE GIVEN

Having stated in a general way Sellars' position and my disagreement, I will give a more detailed account of what Sellars understands by 'the given' because there is further ambiguity in his explanations, and I will indicate which of these views about the given I accept and which ones I don't.

The ambiguity is in his view about concept acquisition. I will distinguish, what I will call, an explicit and an implicit version. I will agree with Sellars that the explicit version is a myth, but I will disagree that the implicit version is a myth as well. And if, as I will argue, the implicit version can serve foundational ends, then Sellars has not refuted one form of foundationalism.

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## II. NARROW (EXPLICIT) SENSE OF THE GIVEN

Sellars explicit (self-conscious) attacks on "the given" are attacks on what he also calls the propria persona principle, which reads:

(PP) If a person is directly aware of an item which has categorial status C, then the person is aware of it as having categorial status C.[12]

He writes: "This principle is, perhaps, the most basic form of what I have castigated as 'The Myth of the Given'"[13] and adds,

> To reject the Myth of the Given is to reject the idea that the categorial structure of the world--if it has a categorial structure--imposes itself on the mind as a seal imposes an image on melted wax.[14]

If we recall that ontological commitment is for Sellars determined by names (logical subjects) and not by the predicate terms, the question of the categorial status required by (PP) should be the question of finding the category of the subject of predication. This is clear when we take note that his nominalistic endeavors are to paraphrase sentences in which the subject terms have an apparent references to abstract entities in such a way that the seeming reference disappears. Predicates have no referential function for him, but are tied conceptually to the nature of the subject phrase. This dependence of predicates comes forth in the following passage in which Sellars, trying to spell out the "descriptive content" of perceptually reductive reports, claimed that at most what can be said within the Manifest Image about this content is this:

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[12] Sellars, "Carus Lectures," 11.

[13] Ibid., 11.

[14] Ibid., 12.

> (PP1) When one ostensibly sees an object which is red and triangular on the facing side, something, in some way red and triangular is in some way present to the perceiver other than as thought of.[15]

In this passage Sellars is trying to express a categorial neutrality about the nature of the subject. The "something" is simply a place holder for an unspecified subject. It is the substitutional existential quantifier. The predicates 'red' and 'triangular' as is implied by the qualifier 'some way' depend on the subject term. In (PP1), all Sellars seems to be concerned with is to deny that we can know inspectionally or innately that this something is a physical object, a state of ourselves, an event, or whatnot. I agree that such knowledge is not given, as follows from the rejection of (PP). James Cornman seems to have a similar reading of Sellars as presented in the following passage:

> Thus he [Sellars] can consistently maintain that color is given in some form or other, but in what form it actually occurs--whether as properties of entities (such as physical objects, light, or sensa). or as internal specifications of sensings, or as something else--is to be decided by what explains best scientifically. On this view, then, science

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[15] Ibid., 21.

> must interpret sensuous features of the world, such as sounds, smells, and tastes; it cannot eliminate them or transform them so much that there remains nothing significantly like them. Such a Sellarsian can, then, eliminate sensuous color from the external world in a Lockean way, but if he does so he must locate something much like it in perceivers. In this respect, Sellars accepts one sort of given.[16]

But if this is what the denial of (PP) and givenness amounts to, then (PP) is misleading. It does not explicitly distinguish between the concept of a subject and predicate. To prevent this possible misreading, I would initially amend (PP) to read:

(PP′) If a person is directly aware of the fact, (Ex) Px, where x has categorial status C, i.e., x = C, then the person is aware of it as having categorial status C, i.e., as P(C).

And I have no difficulty in rejecting this principle. The reason for my agreement with Sellars here is that the x is for me an 'inferred' theoretical entity whose categorial status is uncertain. This needs some explanation. Sellars would agree that x may be viewed as a theoretical entity, but he would not use the word 'inferred' in this context. He would rather speak of the x as a 'caused' conceptual entity. This distinction is correlative with his Manifest--Scientific Image distinction generally. The Manifest Image is a caused conceptual framework; the Scientific

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[16] James Cornman, Perception, Common Sense and Science (New Haven: Yale University Press, 1975), 271.

Image is an inferred conceptual framework. This distinction will be discussed in the chapter on Animal Realism.

However I have an objection to (PP′) as a paradigm of identifying something, and consequently to (PP1) as well. (PP′) is formulated using a quantified variable; I would prefer to use indexical expressions. The paradigm should be:

(PP′′) If a person is directly aware of the fact, P(this here now), where this has categorial status C, i.e., this = C, then the person is aware of it as having categorial status C, i.e., as P(C).

The difference between (PP′) and (PP′′) is that the latter entails the former, i.e., ′P(this)′ entails ′(Ex)(Px)′; but the former does not entail the latter. That is, if I see this thing which is in front of me to be P, it follows that there is something or other which is P; but from the fact that something is P, it does not follow that this something is the thing before me now.

I would modify (PP1) to reflect the use of indexicals:

(PP2) When one ostensibly sees an object which is red and triangular on the facing side, this here now, in some way red and triangular is in some way present to the perceiver other than as thought of.

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## 1. STATUS OF PROPERTIES

We must avoid talking at cross-purposes about properties. To do so we have to be aware of the distinction between objective and phenomenal properties.

The conceptual status of P in 'Something (physical object) is P' is different from 'Something (transcendental) is P'. In the former case P is an objective, physical property governed by the meaning postulate:

> x is P. ≡ .x would appear P to standard observers in standard conditions

A specific example of this is,

> x is red. ≡ .x would look red to normal observers (who are, for example, not color blind) under normal conditions of illumination (such as daylight or incandescent lights)

Sellars accepts this as a necessary truth, but not as a definition or as an analysis of physical redness.[17] The reason for this is that, for Sellars, physical redness is an undefined, i.e., a primitive term in the Manifest Image.

Now this is puzzling since such a formula with a biconditional seems like a prima facie case of an analysis. The only reason the appearance statement could not be an analysis is if the appearance statement itself presupposes the objective statement. And this is indeed the line of reasoning that Sellars takes. The appearance statement is conceptually tied to the contrastive objective statement. The question which must be raised, then, and which was raised by R. Firth in his reply to Sellars' Carus Lectures, is whether the contrastive appearance statement presupposes in turn a non-contrastive appearance statement. To this Sellars replied that the contrastive appearance statement presupposes a non-contrastive objective statement.

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[17] Sellars, "Philosophy of Mind," 142.

My quick reply to such a move is to claim that there is no problem for a sense-data theorist to accept the following identities:

(ID) Sense-datum statement = non-contrastive appearance statement = non-contrastive objective statement

However, in describing the non-contrastive objective statement, e.g., 'This is red', Sellars recategorizes the predicate 'red' from being an attributive predicate to being a mass term.[18] 'This is red' is transposed to 'This is an expanse of red stuff', "where 'stuff' carries with it implications concerning the causal role of determinate portions of stuff in the physical world."[19]

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[18] Sellars, "Carus Lectures," 12, #46.

[19] Ibid., 12, #47.

My reply to this is that if this is meant to be a description of the phenomenological world of a child, then it seems plausible. But if this is intended as a phenomenological reduction to the rock bottom, then I think it fails. To say that the phenomenological experience has to be such as to contain a belief in the causal properties of something is to commit the propria persona fallacy (i.e., to accept the myth of the given). On other occasions Sellars has recognized that in a phenomenologically reduced experience the causal properties are not experienced.

> Of course in seeing it as a pink ice cube we are seeing it as having the causal properties characteristic of ice. But do we see of the object these causal properties? The question is, to be sure, an awkward one. But if we consider certain other questions of a similar form, the answer seems to be no.[20]

So, if Sellars' considered judgment is that causal properties should be excluded from a phenomenological reduction, then I believe the identity thesis (ID) can be accepted. And it seems to me that, at least on the line of reasoning I have followed, Sellars' position entails a phenomenological reduction of perception of physical objects to the awareness of sense data.

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## III. BROAD (IMPLICIT) SENSE OF THE GIVEN

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[20] Sellars, "Sensa or Sensings," 88, #24.

The broad formulation (which also has a right to be recognized as a version of the given) is the claim that people have a pre-linguistic awareness of categories. We find in Sellars the rejection of the following principle:

(P) X can be experienced under some category C prior to the possession of a conventional language.

(P) claims that there is a primordial, pre-linguistic awareness of kinds.

Although Sellars does not explicitly call this principle a version of "the given", he does explicitly reject it--calling the rejection of such a principle "psychological nominalism." Since this principle is a denial of a necessary condition for (PP), it has the right to be called a primordial version of the given.

This principle applies to subjects and predicates alike. I would, of course, also be a foe of the given if the thesis of the (broad) given were formulated as:

(P′) X can be experienced under some category C prior to the possession of a representational system.

My disagreement with Sellars is over the question whether besides conventional languages there is a representational system. I affirm this while Sellars--what can I say?---forgets it.

The narrow and the broad forms of the myth are not equivalent. The denial of the broad sense (P) entails the denial of the narrow sense (PP), but the acceptance of the broad sense does not entail either the truth or falsehood of the narrow sense. The denial of the amended broad sense (P′) is compatible with the possibility of accepting the following amended version of the narrow sense (PP).

(RS-PP) If a person is directly rs-aware of an item which has categorial status rs-C, then the person is rs-aware of it as having categorial status rs-C.

Now Sellars believes this to be a form of the given:

> To reject the Myth of the Given is to reject the idea that the categorial structure of the world--if it has a categorial structure--imposes itself on the mind as a seal imposes an image on melted wax.[21]

And this is exactly what I want to claim. The only qualification that I make is that the idea of a 'categorial structure' has to be disambiguated. A distinction has to be made between a 'conceptual structure' and a 'representational structure'. And my position is that, in a manner of speaking, the world does through evolutionary development of our sensorial and cognitive processes at the animal level impose on us, what may be called, an RS-Manifest Image.

I think my approach is compatible with the Aristotelian-Thomistic view about species impressa, but disagrees with it about species expressa. In "Being and Being

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[21] Sellars, "Carus Lectures," 12, #45.

Known"[22] Sellars confronts the Thomistic tradition and rejects the species impressa hypothesis as entailing a thesis that the senses are in the intentional order; and he rejects the species expressa hypothesis as entailing an abstractive theory of concept formation. The only feature of the Thomistic tradition Sellars accepts is the idea of a concept as a verbum mentis.

My disagreement with Sellars here is about the intentionality of sensing. He fails--forgetting?--to make the distinction between non-conceptual intentionality (representation) and conceptual intentionality (representation). Sensing is a type of non-conceptual intentionality. Sellars agrees with this in "Mental Events" when he attributes to animals representational systems.

It seems to me that if the world did not impose a representation of itself (i.e., a map) at the animal level where learning is necessary to survival, I don't see how animal survival would be possible. As I see it, even if different Gestalts are imposed on different species, still the causal connections between variable Gestalts must be invariant.

The denial of (P) is, however, incompatible with these possible scenarios. According to the denial of (P), there cannot be any categorial structure whatsoever prior to the acquisition of a conventional language.

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[22] Wilfrid Sellars, "Being and Being Known," in Science, Perception, and Reality.

Conventional languages have for Sellars the character of more or less random structures which compete for survival. And ultimately a conceptual structure is accepted for two reasons. The first is that it is useful for explaining and predicting; the second, because of its ability to "picture" the world more adequately than other competing structures.

Sellars' polemics about the myth of the given should be read with the narrow/broad, and conceptual-/non-conceptual representational systems distinctions in mind; otherwise the issue of the polemics may not be clear; in fact, the various polemics may be arguments at cross--purposes.

A case in point is Sellars' running debate over the years with R. Firth. Sellars argues against Firth that the explicit (narrow) version of the given is a myth without realizing that this is not where the real disagreement with Firth lies. Firth in fact agrees with Sellars' verdict that the narrow sense is a myth. In his comments on Sellars' Carus Lectures, Firth wrote:

> I also agree with Sellars (par. 44)[p. 11] that the following principle embodies a fallacy (one that I think might well be called, in the present context, the Fallacy of Conceptual Retrojection): "If a person is directly aware of an item which has categorical

> status C, then the person is aware of it as having categorical status C.[23]

Firth's real disagreement is over the broad (implicit) sense of the given.

The disambiguation of "the given" can also throw new light on the disagreements with C. I. Lewis, R. Chisholm, W. Robinson, J. Cornman, R. Bernstein, T. Russman, A. Marras, H-N. Castañeda, R. Clark, W. Rottschaefer, and Alan Goldman. They all agree, in opposition to Sellars, in positing a pre-linguistic awareness of kinds, i.e., they all accept some version of (P).

## IV. WILLIAM ROBINSON ON THE GIVEN

William Robinson's essay "The Legend of the Given"[24] is possibly the most ambitious attempt to reconstruct Sellars' reasons for believing the given to be a myth. His conclusion is that Sellars has not presented an acceptable refutation of the given in knowledge and, therefore, the given is not a myth, i.e., definitely false, but remains a legend, i.e., possibly true. His procedure is to reconstruct from Sellars' principles the best possible argument against the given, and then refute the argument. However, I contend that his endeavor at refutation fails because of fundamental misunderstandings, and his alleged counterexample, I will argue, is not a counterexample.

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[23] Roderick Firth, "Reply to Sellars," Monist 64 (1981), 97.

[24] William S. Robinson, "The Legend of the Given," in Action, Knowledge, and Reality, ed. H.N. Castañeda (Indianapolis: The Bobbs-Merrill Co., 1975): 83-108.

## A. MISUNDERSTANDING OF THE GIVEN

Robinson starts out by using the following passage from Sellars as a premise:

> (F) the point of the epistemological category of the given is, presumably, to explicate the idea that empirical knowledge rests on a 'foundation' of non-inferential knowledge of matter of fact.[25]

From this premise in conjunction with others, which are supposedly implicit in Sellars, he tries to conclude that "we are, therefore, entitled to assert the possibility of a primordial awareness of sorts that is not knowledge."[26]

But this attempt right from the beginning is completely misdirected. It is obvious from (F) that the given is meant to be a type of epistemic claim; whereas Robinson intends to argue that the given is not epistemic. At best, Robinson is arguing at cross purposes. In other words, there are two concepts of the given being conflated---Sellars' concept, $\text{given}_s$; and Robinson's concept, $\text{given}_r$.

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[25] Sellars, "Philosophy of Mind," 128.

[26] Robinson, "Legend of the Given," 108.

## 4 1. EXPLAINING THE MISUNDERSTANDING

Assuming that Robinson has misunderstood Sellars, my first task will be to explain how this occurred. The best place to start is with Robinson's own difficulty in deciding whether the following formulation represents Sellars' view. (I maintain Robinson's numbering and lettering of theses):

(22) The explication of a foundation view requires that the primordial awareness of sorts used in the explication be non-inferential knowledge of matters of fact.[27]

It seems clear to me that (22) follows from (F): both are referring to a kind of foundational non-inferential knowledge. But this reference to knowledge is not clear to Robinson.

He writes: "It is clear that if (22) is true there is no hope of analyzing the given non-epistemically."[28] This is correct, and Robinson should have terminated his search for a non-epistemic given. But he doesn't. And in a footnote he writes:

> There may be a temptation to cut off this possibility by holding that Sellars is assured of the truth of (22) because he makes it true by definition. (This is tantamount to including 'being non-inferential knowledge' in the definition of givenness.)[29]

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[27] Ibid., 105.

[28] Ibid.

[29] Ibid., 106.

Yes, this is exactly what Sellars intends. The given is, by definition, an epistemic notion! So how are we to explain Robinson's failure to see this? Suppose (22) is Sellars' considered position. In that case, Robinson says: "Such a move would indeed simplify the present discussion, as also several other in this essay."[30] What it really means is that his discussions are pointless since he is trying to establish claims not really denied by Sellars.

So what are his reasons for thinking that Sellars would deny (22)? He gives two. The first reason is that the acceptance of (22)

> would also have the effect of making Sellars' results irrelevant to some traditional views. Price, for example, is at some pains to distinguish sensing from knowing, in his introduction of sensing sense-data. Vide H.H. Price, Perception (London: Methuen, 1932): 5, 17-18, and esp. 7.[31]

The second reason is that "section I, para. 3 of [Sellars'] EPM ["Empiricism and the Philosophy of Mind] (128-29) is barely intelligible on the assumption that Sellars is taking (22) as definitionally true."[32]

Let us examine these reasons. The first reason Robinson gives is that according to Price the given of sense-data is equivalent to the sensing of sense-data, and the sensing of sense-data is not a form of knowing; therefore, the given is not a form of knowing.

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[30] Ibid.

[31] Ibid.

[32] Ibid.

In the passages referred to in Price, Price is making a distinction between two types of 'intuitive apprehensions', namely, 'apprehension that' and 'apprehension of'. These are elsewhere identified with 'knowledge of facts about' and 'knowledge by acquaintance' respectively.[33] Robinson is simply mistaken in thinking that Price is making a distinction between sensing and knowing; rather he is making a distinction between two kinds of knowing---sensing as knowing by acquaintance, on the one hand, and knowing of facts about, on the other. Sensing, for Price, is a type of knowledge. This is even suggested by looking at the index of his Perception under the heading "sensing" which has the subheading "is a form of knowledge". So Robinson's reasoning that if Sellars accepts (22), he will not do justice to Price is caused by a misreading of Price.

The second reason Robinson has for thinking that Sellars would reject (22) is based on his reading of the following passage from Sellars:

> On alternative (a) the fact that a sense content was sensed would be a non-epistemic fact about the sense content. Yet it would be hasty to conclude that this alternative precludes any logical connection between the sensing of sense contents and the possession of non-inferential knowledge. For even if the sensing of sense contents did not logically imply the exis-

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[33] H. H. Price, Perception (London: Methuen & Co., 1932), 139.

> tence of non-inferential knowledge, the converse might well be true.[34]

Robinson's comment on this passage is this:

> Sellars does not criticize this view, but goes on to set out alternatives. If he thought that what is required to explicate a foundation view must be non-inferential knowledge, we might expect that he would reject the alternative just mentioned immediately. Thus, the fact that he does not do so gives us some reason for thinking that Sellars does not believe (22).[35]

But, contrary to Robinson's reading, Sellars does reject alternative (a) immediately by pointing out that it would be a non-epistemic fact. We could deduce this position from a general principle of Sellars' epistemology, namely, that *epistemic facts cannot be explicated by non-epistemic facts*, as is clearly stated in the following passage:

> Now the idea that epistemic facts can be analyzed without remainder--even 'in principle'--into non-epistemic facts, whether phenomenal or behavioral, public or private, with no matter how lavish a sprinkling of subjunctives and hypotheticals is, I believe, a radical mistake--a mistake of a piece with the so-called 'naturalistic fallacy' in ethics.[36]

~~By pointing out that~~ something is a non-epistemic fact immediately precludes it from serving in an explication of an epistemic fact. Paradoxically, Robinson seems to be aware of this principle in Sellars when he attributes to

[34] Sellars, "Philosophy of Mind," 129.

[35] Robinson, "Legend of the Given," 105.

[36] Sellars, "Philosophy of Mind," 131.

him the claim that "epistemic facts cannot be analyzed without remained into non-epistemic facts."[37] So it is puzzling why Robinson persists in seeking a non-epistemic given.

Perhaps Robinson is not clear on how Sellars is using the notion of 'analysis' or 'explication'. In "Empiricism and the Philosophy of Mind," Sellars distinguishes between an analysis and an explanation. The form for an analysis, Sellars tells us, is this: if q is the correct analysis of p, then it is impossible for someone to believe p without believing q.[38]

Yet Robinson's effort is to conclude that "the given can be analyzed non-epistemically. For it can be analyzed as a non-subsumptive use of an ur-concept" (italics mine).[39] Let us ignore for the moment the notion of 'non-subsumptive use of an ur-concept' and concentrate on the claim that 'the given can be analyzed non-epistemically'. This is not how Sellars uses the term 'analysis'. There is no such thing for Sellars as a non-epistemic analysis of an epistemic fact. If there were, it wouldn't be an analysis. Robinson has compounded his misunderstanding. Not only has Robinson misunderstood Sellars notion of the given$_s$, but he has also misunderstood Sellars's notion of analysis as well.

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[37] Robinson, "Legend of the Given," 86.

[38] Sellars, "Philosophy of Mind," 141.

[39] Robinson, "Legend of the Given," 104.

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## B. ROBINSON'S ARGUMENT

Starting then with these two misunderstandings, Robinson reconstructs the following alternatives from Sellars' writing:

> (1) Either (a) the givenness of sense contents is defined in terms of non-inferential knowledge of sense contents; or (b) the givenness of sense contents is a "basic or primitive concept of the sense-datum framework."[40]
> (2) Either (c) sensing is a "unique and unanalyzable act"; or (d) sensing is analyzable.[41]
> (3) Either (e) sensing is analyzable in non-epistemic terms; or (f) sensing is analyzable in epistemic terms.[42]

Robinson notes that if we identify sensing with being given, then substituting 'given' for 'sensing' in the above formulas, we get the following counterparts:

> (c') Something's being given is a unique and unanalyzable occurrence.[43]
>
> (e') Givenness is analyzable in non-epistemic terms.[44]

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[40] Ibid., 85.

[41] Ibid., 86.

[42] Ibid.

[43] Ibid., 87.

[44] Ibid.

(f′) Givenness is analyzable in epistemic terms.[45]
He interprets Sellars′ rejection of the given as "the rejection of (a), (c′), (e′), and (f′)";[46] and he believes if any of these theses has not been refuted, then the given has not been refuted. Robinson evidently agrees with these rejections save for (e′) which he wants to defend. He points out that (e′) "contains the term ′analyzable′, a term which might lead to quite extraneous difficulties."[47]

The difficulties this does lead to are not extraneous, but are, I believe, as I have already mentioned, a fundamental reason for Robinson′s misunderstanding of Sellars. Sellars points out that various entailment relations may exist between propositions which do not amount to an analysis, and that analysis is not to be confused with explanation. However, Robinson ignores these precautions and provides an account which is not an analysis by Sellars′ stipulations. Therefore, Robinson′s so called ′analysis′ is at cross-purposes with Sellars′.

## 1. RECONSTRUCTION OF SELLARS′ ARGUMENT

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[45] Ibid.

[46] Ibid.

[47] Ibid.

Robinson reconstructs a Sellarsian argument for the conclusion (7) as based on the following implicit premises in Sellars.

(10) 'x has primordial classificatory consciousness' entails 'x makes a primordial use of a concept'.

(11) 'x makes a primordial use of a concept' entails 'x immediately subsumes something under a concept'.

(12) 'x immediately subsumes something under a concept' entails 'x has non-inferential knowledge'.

Therefore,

(9) 'x has primordial classificatory consciousness' entails 'x has non-inferential knowledge'.

From (9) and the premise:

(8) 'x has a primordial awareness of sorts' entails 'x has primordial classificatory consciousness'.

it can be concluded:

(7) 'x has a primordial awareness of sorts' entails 'x has non-inferential knowledge'.

The argument is valid. It has the form of a series of hypothetical syllogisms. But according to Robinson the argument is not sound. Since Robinson wants to deny the truth of (7) while accepting (8), he is forced to reject (9). To reject (9) he must reject at least either (10), (11), or (12). Robinson does not dispute either (10) or (12). As to (11), he writes "with (11) we have come to a 'rock bottom' principle of Sellars' system" and, he adds, "(11) is false."[48]

To make his case, Robinson combines premises (8) and (10) to draw the conclusion:

(13) 'x has a primordial awareness of sorts' entails 'x makes a primordial use of a concept'.

He then defines the idea of a 'primordial use of a concept' as the thesis:

(14) 'x makes a primordial use of a concept $C_1$' entails '$C_1$ is independent of physical concepts'.

Combining (13) and (14) we get:

(15) 'x has a primordial awareness of sort $C_1$' entails '$C_1$ is independent of physical concepts'.

He adds a terminological point: "I will call concepts which are independent of physical concepts ur-concepts."[49] As an example, Robinson gives the concept of red as an ur-concept. He goes on to claim that Sellars would deny the existence of ur-concepts in his sense. This is true. There are various sensorial experiences, such as an after--image, which Sellars would say are conceptualized on the basis of perceptual experiences of physical objects. What Sellars denies is that perceptual reports entail ur-concepts. But Robinson thinks that if Sellars granted the existence of ur-concepts, then he would grant the following thesis:

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[48] Ibid., 92.

[49] Ibid., 93.

(16) 'There are ur-concepts' entails 'descriptive contents [of perceptual reports] can be intrinsically characterized by using ur-concepts'.

I don't think this is true for Sellars. Sellars can grant that ur-concepts (in Robinson's sense) are genetically secondary as conceptually derivative, but still hold that they now have an independent application in experience. But even if we grant the current independent use of ur-concepts, it does not follow that perceptual reports of physical objects are analyzable in terms of ur-concepts.

Not mindful of this objection, Robinson's aim is to demonstrate the possibility of ur-concepts. His reasoning is this. Robinson points out that (11) entails:

(11a) 'x makes a primordial use of a concept' materially implies 'x immediately subsumes something under a concept'.

This can be granted. And he writes: "(11) is false if the falsehood of (11a) is possible."[50] He adds that the denial of (11a) "can be made intelligible . . . if non-subsumptive uses of concepts can be made intelligible."[51] Since

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[50] Ibid., 102.

[51] Ibid., 102.

Robinson agrees that subsumptions under a concept are thoughts, it follows that

(a) If there are primordial awarenesses of sorts, they have to be thoughts.

Robinson's refutation boils down to the claim that there is a use of concepts which is not subsumptive and is not an awareness of sorts. To make his point, he distinguishes between subsumption and the counting use of concepts.

But before I pursue his reasoning further, we need a clarification of the concept of a concept. As Robinson proceeds to construct his counter-argument to Sellars, he introduces the following definition of concept:

> Definition III. A concept is a mind dependent ability to be in a state which corresponds to a property.

He goes on to make the following theses about concepts: "a use of a concept is the actualization of an ability to be in a state corresponding to a property"; and "a subsumptive use of a concept is the actualization of an ability to be in a state corresponding to an assertion."[52]

By contrast, for Sellars a concept is a word that has an essential use in inferences. And since, for Sellars, there are mental words that are functionally analogous to physical linguistic words, it is proper to talk about mental concepts as well. Given this understanding of concepts, Robinson's definition of concepts would be, with qualifications, at best a sub-category of Sellars' concepts. The translation into Sellars idiom would be something like this: A mental predicate concept corresponds to a linguistic predicate concept.

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[52] Ibid.

Robinson's understanding of concepts, though not quite Sellars', is really innocuous and not at cross--purposes. However, when Robinson introduces the idea of ur-concepts he opens room for misunderstanding. The term 'ur-concept' is used by Sellars and R. Firth in their polemics with each other.[53] Sellars and Firth use it in a sense in which

(23) x is an ur-concept = df. x is a concept in which the appearance-reality distinction has collapsed.

Robinson, however, offers the following definition:

(24) x is an ur-concept = df. x is a concept independent of physical concepts.[54]

Sellars denies (24). In his debate with Firth, Sellars insists that ur-concepts are applicable only to physical objects, and, therefore, they are conceptually dependent on the concept of a physical object. Robinson is therefore correct in claiming that Sellars denies the existence of ur-concepts in Robinson's sense. Sellars can agree with Firth that the appearance-reality distinction collapses, but not that it collapses into an ur-concept of an appearance, as Firth claimed in his reply to Sellars, but rather that it collapses into an ur-concept of a physical object; and, by the same token, Sellars can reject Robinson's definition of an ur-concept as independent of the concept of a physical object.

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[53] See Sellars, "Carus Lectures" and Firth, "Reply to Sellars."

[54] Robinson, "Legend of the Given," 93.

If Robinson is to make his case, he has to come up with an example of a concept which is independent of physical object concepts, and which is not subsumptive (classificatory), and which does not involve a thought (proposition). To do this he cites the existence of a primordial use of counting concepts. He claims that a classificatory use of concepts presupposes a counting use of concepts.

> If I count the books on my shelf, I may say, as I point, "One, two, three, . . ." These words reflect a state of mind corresponding to the properties 'first book counted by me on this occasion', 'second book counted by me on this occasion', etc. But I have not subsumed these books under concepts corresponding to these properties. Nor, indeed, could I have correctly done so until I had counted them. Even if I had said "This is the first book, this is the second book, . . . ," this would only look like subsumption, but would actually be counting. Of course, my counting does provide a ground for subsumption, by myself or another, of these books under such concepts as "first book counted by me on this occasion." But this is not to say that the original counting is itself a case of subsuming.[55]

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[55] Ibid., 103.

Evidently Robinson wants to conclude that counting is a type of use of concepts that is independent of subsumption:

> a use of a concept is the actualization of an ability to be in a state corresponding to a property, while a subsumptive use of a concept is the actualization of an ability to be in a state corresponding to an assertion.[56]

It is not clear that Robinson is providing a distinction, since it is evident that counting can have the appearance of an assertoric subsumption, e.g., 'This is the first book'.

However, Robinson is overlooking a necessary condition required for counting to take place. In order to count, items have to be distinguished in some manner. The manner in which anything is distinguished is by way of a concept. For Sellars this is a fundamental point: "Observing that the situation is thus and so already involves the use of a conceptual frame.";[57] and "to have the ability to notice a sort of thing is already to have the concept of that sort of thing."[58] It is only relative to this differentiation through concepts that counting makes sense. Suppose we are looking at two squares: one green and the other red, and two circles: one green and one blue.

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[56] Ibid., 102.

[57] Wilfrid Sellars, "Some Reflections on Language Games," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 333.

[58] Sellars, "Philosophy of Mind," 176.

Imagine the following dialogue about counting these things.

Jack: Count.

Jill: Count what?

Jack: The things before you.

Jill: What am I to take as a 'thing' here?

Jack: Enclosed figures.

Jill: There are four.

Jack: Now count the number of green things.

Jill: Two.

Jack: How many red circles are there?

Jill: None.

As we can see, counting makes sense relative to subsuming that which is to be counted under concepts. Robinson presupposes the subsumptive concept by saying "If I count the books on my shelf . . ." After all, he could have also said "If I count the books in my room . . ." And then possibly he would get a different count by including books on a table, on the floor, etc. The point is that by setting out to count books, he already has made a subsumptive use of concepts by differentiating his environment through the concept of a book.

In conclusion, Robinson believes that Sellars allows for a given in a non-epistemic sense, which by his understanding is a non-subsumptive use of concepts, and he believes that he has provided for a non-subsumptive use of concepts in the case of counting. Robinson errs on both counts. Sellars does not allow for a non-epistemic given; and counting, rather than being different from subsumption, presupposes subsumption.

But perhaps I have missed something in Robinson's argument. If I have then my excuse is the same as C. Echelbarger's, who wrote in a criticism of Robinson's essay, "I am still in the dark about this notion of a primordial awareness involving nonsubsumptive uses of ur-concepts."[59]

## V. SELLARS AND LEWIS ON THE GIVEN

Talk about a given element in knowledge is a prominent aspect of C.I. Lewis' Mind and the World Order, in which he wrote:

> There are, in our cognitive experience, two elements; the immediate data, such as those of sense, which are presented or given to the mind, and a form, construction, or interpretation, which represents the activity of thought. Recognition of this fact is one of the oldest and most universal of philosophic insights.[60]

Sellars agrees with Lewis that this bifurcation of cognitive experience into a given and an interpretative element is probably a universal assumption of philosophers; but

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[59] Charles G. Eschelbarger, "An Alleged Legend," Philosophical Studies 39 (1981), 230.

**Sellars** does not believe that this assumption is an insight, it is rather a universal mistake!

Sellars views his polemics with Chisholm and Firth as an extended polemic with Lewis. This is clearly expressed in the following passage:

> Firth's paper ["Coherence, Certainty, and Epistemic Priority"] is such a rethinking of Lewisian themes. It is not so much *on* Lewis as it is Lewis himself in that mode of immortality with which Plato invested Socrates not by writing about Socrates, but by being Plato. If Firth is Lewis, however, so, too, is Chisholm, who will also play a major role in these pages. And if Firth is not Chisholm, nor Chisholm Firth, so much the worse for identity.[61]

That Sellars makes an identification between Lewis and Firth is significant for the following reason. I believe that Sellars has misinterpreted Lewis, and the nature of this misinterpretation comes to the surface in Sellars' polemics with Firth. Sellars' uneasiness with his interpretation of Lewis is expressed by the fact that he has tried to come to grips with Firth's paper "Coherence, Certainty, and Epistemic Priority" four times: in "Givenness and Explanatory Coherence" (1973); in the Appendix to the first lecture of "Structure of Knowledge" (1974); in "More on Giveness and Explanatory Coherence" (1979); and

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[60] C.I. Lewis, *Mind and the World Order* (New York: C. Scribner's Sons, 1929), 38.

[61] Wilfrid Sellars, "Giveness and Explanatory Coherence," *The Journal of Philosophy* 70 (1973), 612.

finally in the first Carus lecture "The Lever of Archimedes" (1981).[62] Firth replied to the last.

References to Lewis are found as early as "Is There a Synthetic 'A Priori'?"[63]-- written before his monumental "Empiricism and the Philosophy of Mind", and here Sellars presented his first interpretation of Lewis:

> If we put this implication is a slightly different way, we immediately establish contact with a characteristic contention of Professor Lewis. All classification of objects, however confident and preemptory, is a venture, a venture which at no point finds its justification in a pre-symbolic vision of generic and specific hearts on the sleeves of the objects of experience. Classification resembles the grasping tentacles of an octopus, now tentative, now confident, rather than a salesman's selection of a suit for a customer after a glance at his build. I am afraid, however, that our agreement with Lewis is more shadow than substance. For while he writes in this manner of the interpretation of the given, he also holds that the sensible appearances of things do wear their hearts on their sleeves, and that we do have a cognitive vision of these hearts which is direct, unlearned, and incapable of error -- though we may make a slip in the expressive language by which these insights are properly formulated. In other words, the assumption to which we are committed requires to extend to all classificatory consciousness whatever, the striking language in which Lewis describes our consciousness of objects.[64]

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[62] Sellars, "Givenness and Explanatory Coherence;" idem, "Structure of Knowledge;" idem., "More on Giveness and Explanatory Coherence," in Justification and Knowledge, ed. George Pappas, (Dordrecht, Holland: D. Reidel, 1979): 169-182; idem, "Carus Lectures."

[63] Wilfrid Sellars, "Is There a Synthetic 'A Priori'?," in Science, Perception, and Reality.

And the last reference to Lewis appears in the Carus Lectures, where Sellars still charges him with believing in the Given: "In the grip of the Myth of the Given, a C.I. Lewis . . ."[65]

Sellars, in his rejection of the Given, is criticizing, what he takes to be, a fundamental thesis of Lewis' philosophy. This is the view "that we do have a cognitive vision of these hearts [sensible appearances] which is direct, unlearned, and incapable of error -- though we may make a slip in the expressive language by which these insights are properly formulated."

There is an ambiguity here which is the source of a misinterpretation. Reference is made to "sensible appearances". Given Sellars' distinctions as we find them in "Mental Events" (1981),[66] we are in a position to ask: Are sensible appearances conceptual or non-conceptual? And if they are non-conceptual, are they representational or non-representational?

Now, it is not clear to me that these distinctions were always in the foreground of Sellars' thinking. They are in the late seventies, and I suspect that this is why

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content all its own and wears it on its sleeve." "Epistemology Relativized," in Ontological Relativity and Other Essays (New York: Columbia University Press, 1969), 89.

[65] Sellars, "Carus Lectures," 20, #85.

[66] Wilfrid Sellars, "Mental Events," Philosophical Studies 39 (1981): 325-345.

"More on Givenness and Explanatory Coherence" was written. But in his interpretation of Lewis, Sellars seems to have been working with a dichotomy whereby either something is conceptual or it is not--meaning it is not even representational. And since Lewis clearly states that the given is non-conceptual, Sellars takes this to mean that it is non-representational.

To understand Sellars' criticism of Lewis, we first need to know what Lewis is claiming. I believe that Lewis makes the following four claims:

(I) All empirical cognitive experiences are composed of two cognitive elements: the given (in intuition) and an interpretation of the given.

(II) All meanings are divided into sense meanings (independent of language) and linguistic meanings.

(III) The given and the interpretation can be found in sense meaning independently of linguistic meaning.

(IV) The given is needed to provide foundations for empirical knowledge.

Sellars, as I understand him, in his initial interpretation of Lewis would have denied either my interpretation of Lewis or the truth of these claims. Against the first claim he would have said either--and I am not certain which--that all cognitive experience is conceptual or that (I) is a misinterpretation of Lewis: the claim should be that (I') all empirical cognitive experiences are composed of a non-cognitive (given) and a cognitive (interpretational) element.

Against the second claim, he would have said that sense meaning (if there is such a thing) can exist only in the ambience (in some sense) of linguistic meaning. Against the third claim, he would have said that there is no conceptual meaning independent of linguistic meaning. Against the fourth, he would have said that since the given is non- cognitive, it cannot provide epistemic foundations.

The given for Lewis is a direct cognition through sense meaning (representation) which is incorrigible, can be true, and foundational for knowledge. Does Sellars address himself directly to this complex claim? No. In his polemics, Sellars is working, I believe, with the following argument.

(1) For a person to be aware of something requires the use of concepts.

(2) Concepts arise only through the learning of a conventional language.

Thus,

(3) to be aware of anything at all requires the possession of a conventional language.

Since (1) and (2) are presupposed by (3), their denial would presumably amount to the acceptance of what we can call a primordial sense of the given. But I don't think that this is consistent with Sellars considered judgment.

(1) could be taken as an analytic statement. In that case it explicates Sellars' use of 'aware'.

To confront Lewis on his own ground, the question we must ask is: Is there anything analogous to conceptual awareness? And Sellars should answer, animal "awareness." I believe that Sellars' (1) was denied by Lewis when he introduced the concept of 'sense meaning'.

## A. THE OBJECTIVE AND SUBJECTIVE

The classification of any indeterminate awareness as subjective is already interpretational. In Lewis' terminology, the given, if such an interpretation is used, is the object of subjective awareness which does not contain concepts; whereas objective awareness is anticipatory of experiences and does contain concepts. If we agree that the necessary condition of any awareness is classificatory consciousness, then Lewis' distinction amounts to the following. Subjective awareness classifies without an anticipatory or predictive component in the awareness; whereas objective experience is precisely, and contrastingly, preoccupied with anticipatory and predictive classification. Subjective awareness consists of the ability to see similarities, continuities, differences, and discontinuities. Objective awareness consists of the ability to anticipate and imagine forthcoming experiences. This classification of present experiences as signs of anticipated experiences Lewis calls 'concepts'.

The subjective-objective distinction could be made on the basis of the type of awareness involved. Thus, the awareness of similarities and dissimilarities and relations, understood as expressing how things appear to one, is a subjective affair. Expecting determinate appearances, however, is an objective matter. 'Knowledge', as Lewis uses this word, is applicable only to such objective judgments in which something is anticipated or predicted. Since subjective awarenesses are non-anticipatory and non-predictive classifications, Lewis refrains from applying to them either the word 'judgment' or 'knowledge'.

The distinction between subjective and objective experiences is not a distinction to be found in a single experience, a single experience is neutral between subjectivity and objectivity. The "distinction between the subjective and the objective," writes Lewis, "is irrelevant to *givenness* as such."[67] In the case of a single experience a person is conscious of the contents of the experience, but is not reflectively conscious about the connection of this experience to other experiences, except in terms of similarities and dissimilarities.

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[67] Lewis, *Mind and the World Order*, 63.

From a Sellarsian point of view all of this can be put it terms of his description of a Representational System (RS) as consisting of entrance positions, moves within the representations, and exist transitions. Lewis' 'given' is equivalent to Sellars 'entrance position', and Lewis' 'sense meaning' is equivalent to Sellars' 'Humean inference'. The proper correlations between Lewis' and Sellars' views are the following:

| | Sellars | Lewis |
|---|---|---|
| cept = | | RS-entry = given<br>RS-inference= sense meaning (= con-<br>Humean inference)<br>RS-exit |
| | mantic | L-entry = proposition<br>L-inference = syntactic and se-<br>meaning<br>(Aristotelian inference)<br>L-exit |

(RS = Representational System; L = Language)

Now we can agree that in some way these two representational systems are connected in human beings. What is the proper way to talk about them? For Lewis, both systems are phenomenologically accessible. For Sellars, this is not the case for the Humean RS. It is, for Sellars, part of an explanatory framework. However, this is not an impasse. After all, Lewis writes--paradoxically--that "the given" is not given: "The given is in, not before, experience."[68]

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[68] Lewis, Mind and the World Order, 55.

To make sense of this, we can borrow the apparatus of Firth's article "Sense-Data and the Percept Theory" and distinguish that which is straightforwardly given as described correctly by, what Firth calls, the Percept Theory; and that which is given through a phenomenological reduction, which is described by the Sense-Data Theory. Lewis' claim is that "the given" is given only in phenomenological reduction. And phenomenological reduction is a technique of "bracketing" and abstraction.

Sellars' position is a form of the Percept Theory, which can be formulated as the denial that a statement expressing the perception of a property of a physical object can be analyzed by a statement expressing the sensing of a property of a sense datum. Now it is assumed that there are such states of consciousness as described by the Percept and the Sense Datum Theories. It is simply denied by the Percept Theory that the state of consciousness described by the Sense-datum Theory is a 'constituent of' or 'present in' (even implicitly) in the state of consciousness as described by the Percept Theory: the two states of consciousness are distinct. Now Firth agrees with this. But he believes that a connection between the statements expressing these two states can be made through a 'definition is use'.

> We can say that the statement "These two perceptions are different interpretations of the same sensory core", should be understood to mean: "If these two

> perceptions were perceptually reduced exactly similar states of direct awareness would be produced in the two cases."[69]

In view of this "definition in use," the issue between Sellars and Lewis (= Firth = Chisholm) becomes whether Sellars' 'sense impressions', which are theoretical posits, are accessible to consciousness through phenomenological reduction. The issue becomes an issue about the possibility of phenomenological reduction. It is this question which Sellars tackled in his first lecture of the Carus Lectures. And though Sellars did go some distance in his phenomenological reduction, it was not far enough--as Firth argued in his reply.

I will discuss this in greater detail in the next chapter on perception.

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[69] Roderick Firth, "Sense-Data and the Percept Theory," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New York: Anchor, 1965), 248.

# CHAPTER 9

# PERCEPTION

My main interest in this chapter is to argue that an analysis of perceptual reports about physical objects yields phenomenal (sense data) reports which are foundational for empirical knowledge. This may be called the epistemological problem of perception. But I am also interested in examining the ontological problem of perception, which is the problem of giving an explanation of both veridical and unveridical perceptions. The crucial distinction here, for Sellars, is between giving an analysis and giving an explanation. It is Sellars claim that this distinction has often been conflated--creating a confusion. Epistemology is concerned with the analysis of perception; ontology with its explanation.

The key question is whether a sense data analysis of perception is possible. If it is, then sense data reports can provide foundations for empirical knowledge--a thesis conceded by Sellars. On the other hand if the explanation of perception requires the postulation of something like sense data, then these must find a place in a Materialistic ontology. Sellars is interested in solving both the epistemological and the ontological problem. His considered judgment on the epistemological problem is that analysis of perception does not yield sense data; while an explanation of perception does require the positing of something like sense data, namely sense impressions (or sensings) construed adverbially as states of people. And in the Scientific Image these sense impressions are recategorized as sensa, which are absolute processes.

I find no difficulty in accepting Sellars' explanation of perceptual reports as causally mediated by sensa; but I do find difficulty in accepting his reasoning for rejecting sense data through an analysis of perceptual reports. Counter to Sellars I accept the availability of sense data through phenomenological reduction (if that can be considered an analysis), and, furthermore, I accept the validity of the so called Sense-Datum Inference. Since Chisholm has formulated an explicit argument against this inference, I will defend it from his criticism.

## I. PERCEPTUAL REPORTS

The first task is to understand the nature of perceptual or observational reports as such. In the Manifest Image we say that we perceive physical things having proper and common sensibles (Aristotle's way), or having primary and secondary qualities (Locke's way). If we add that physical objects really have the properties which we perceive them to have, we have what is commonly called

Naive or Direct Realism. The Manifest Image includes Naive (Direct) Realism as its epistemological and ontological bedrock. However, Naive or Direct Realism has a difficulty in accounting for the phenomena cited in the so-called arguments from illusion, relativity, time-lag, the causal chain; and such mental images as hallucinations, after-images, eidetic images, and phosphenes. The argument from illusion uses such cases as, for example, when we see something that looks like A, or that we mistakenly believe to be A, but which on closer inspection it turns out that what we were looking at was something else, B, or there was nothing there at all to be seen.

In view of the possibility of unveridical perceptions, the classical approach to the problem of perception is to reject Naive (Direct) Realism. This is accomplished by accepting an ontology that makes qualitative properties subjective. This is offered, first, as either an analysis or as an explanation of unveridical perceptions, and then the analysis or explanation is extended to account for what happens in veridical perceptions as well.

Were these arguments from 'illusion' successful? Frank Jackson in his admirable book Perception[1] points out that these classical arguments beg the question. His reason is that in all such arguments we can at most conclude that there is a need to distinguish appearance talk from reality talk, and this no one disputes. What is, however, in dispute, he points out, concerns the possible ontological and epistemological inferences that can be made from particular kinds of appearance talk.

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[1] Frank Jackson, Perception (Cambridge, 1977).

## A. DISAMBIGUATION OF 'PERCEPTION'

To state the problems of perception more clearly, and to avoid arguing at cross purposes, we first have to disambiguate perception terms because they can be used in contexts other than the ones philosophers are interested in. To get oriented in perception talk, we have to make a number of classifications and distinctions. I will do this from a formal perspective. There is no necessity to examine particular cases in ordinary language, since all such cases can be claimed to fall under one or another of the forms to be distinguished. And for my purpose, which is to determine which forms allow which inferences, it is sufficient to concentrate on the forms.

First there are uses of 'seeing' which are not perceptual. In the example 'I see what you mean', 'seeing' is being used almost synonymously with 'understanding'. In the example 'I see that there is still time' may be paraphrased as 'I conclude that . . .' The uses of 'see' and other perceptual verbs which philosophers are interested in require a relevant type of sensorial stimulation. Exactly how to formulate this relevancy is a bit of a problem. However, in the literature on perception, we find two sets of distinctions constantly being used. The first is between propositional and non-propositional forms; the other between opaque and transparent forms. I would like to distinguish these so that I can locate myself and Sellars in this classification.

We may begin by distinguishing on the basis of surface grammar between propositional and non-propositional types of perception. Propositional perception can be characterized linguistically as containing a reference to a perceiver, a psychological verb of perception (e.g.,'seeing', 'hearing', etc.), and having as its accusative a propositional clause: thus, 'I see that this ice cube is pink'. While non-propositional perception takes as its accusative a name or a descriptive phrase, as, for example, 'I see this pink ice cube'.

To understand perception talk reflectively, we must be able to state the kinds of inference patterns perceptual reports enter into. The first inference pattern common to all normal uses of perception talk (both propositional and non-propositional) is that they entail that what is perceived is true and that the object of perception exists; thus, 'S sees that D is F' entails 'D is F' (which in turn entails 'D exists') and 'S sees D' entails 'D exists'.

This is an expression of what Gilbert Ryle, and Sellars in agreement, call the 'achievement' sense of perception.

## B. SURFACE GRAMMAR: PROPOSITIONAL PERCEPTION

I will first distinguish various forms of propositional perception without trying to reduce or subsume one form under another (which may be possible).

(A) S sees that this is a(n) D.
(B) S sees that this is F.
(C) S sees that this D is F.
(D) S sees that this is the D'.
(E) S sees that this D is the D'.
(F) S sees that this is N.
(G) S sees that this is he.
(H) S sees that this D is he himself.
(I) S sees that this is something.

The letters are variables that take the following types of substituends: 'S' for persons, 'D' for common names, 'D' for definite descriptions, 'F' for properties (monadic and polyadic), 'N' for proper names.

All forms of perception have demonstrative references. The reference to a place is expressed by the demonstrative 'this', while the reference to a time is expressed by the tense of the verb. We could make this explicit by rewriting (A), for example, as 'S sees that this here, now is a(n) D′. Let me quickly add that although I have distinguished these various forms, I cannot do them justice here. That would require a separate treatise. All I can do is focus on a particular form that is essential for a critical appraisal of Sellars. This form is (C).

As I have already cautioned the form itself can be confused with what I would call a non-perceptual form. For example, it could be confused with something like

S sees that 2 + 3 = 5.

In this example the word ′see′ has a non-perceptual use. Here the word is used synonymously with something like ′understand′ or ′realize′. What is wanted for perceptual cases is the acquisition of information through the senses. But again we must be cautious because of cases like

The doctor, by looking at John, sees that John is sick. Here the difficulty is that the information that John is sick is apparently inferred. We want to isolate a primary sense of propositional non-inferential seeing, or, which may be called primary propositional seeing. With these precautions we can distinguish within propositional perception between a transparent and an opaque form.

### 1. TRANSPARENT FORM

The transparent form allows substitution of co-referential terms in the subject of the accusative. To exhibit the underlying meaning of such transparent propositional perception claims, I will rewrite

S sees that this D is F.

as,

S sees of this D that it is F.

or

S sees this D to be F.

From this form we can infer

S sees that something is F.

or

(Ex) S sees that Fx.

For 'x' we can substitute freely any co-referential term, description, or indexical without affecting the truth value of the statement. A person may indicate the x in various ways, as by pointing or describing without committing himself to the sort he is referring to.

And since we are working with the achievement sense of perception it follows from

S sees that this D is F.

that

(Ex) Fx

## 2. OPAQUE FORM

The opaque form, by contrast, does not allow substitution of co-referential terms in the subject of the accusative proposition. Quantified,

S sees that this D is F.

becomes,

S sees that (Ex) (x=D) & F(x)

Substituting different co-referential terms for the x will result in an altered truth value for the whole statement.

Again, because we are assuming the achievement sense of perception, from this form we can infer

(Ex)[(x=D) & F(x)]

and

F(D)

## C. SURFACE GRAMMAR: NON-PROPOSITIONAL PERCEPTION

By contrast, in the non-propositional form of perception the verb takes as its accusative the name or description of some object or event. Let us focus on the form

S sees this D.

As with propositional perception, we may distinguish a transparent (non-epistemic) and an opaque (epistemic) form. Non-epistemic perception was distinguished by J.F. Soltis,

G. Warnock, and F. Dretske,[2] and is now usually referred to as 'simple seeing', and will be designated by '$\text{seeing}_n$'. Simple seeing can be distinguished from epistemic (opaque) seeing (designated '$\text{seeing}_e$') by the following traits:

(1) Simple seeing allows substitution of perceptually possible co-referential terms for the objects of perception; while opaque (epistemic) perception does not.

It should be noted that the types of co-referential terms are restricted to those which can be used perceptually, as qualified by F. Jackson in the following passage:

> I suppose 'see' to be such that 'S sees D and D = D'' entails that S sees D'. That is, 'D' is here subject to substitution (of co-referring terms) and so 'S sees ___' is a transparent construction.[3]

Dretske expresses the requirement this way: "if S $\text{sees}_n$ D, and $D_i$ is an associated description of D such that S can $\text{see}_n$ $D_i$, then S $\text{sees}_n$ $D_i$."[4] The restriction is meant to exclude such cases as cited by Cornman in the following passage:

> if any volume of water is identical with some conglomeration of $H_2O$ molecules, then seeing, tasting,

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[2] J.F. Soltis, Seeing, Knowing and Believing (London, 1966). G.J. Warnock, "Seeing," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New York: Doubleday, 1965). Fred Dretske, Seeing and Knowing (Chicago: University of Chicago Press, 1969).

[3] Frank Jackson, Perception: A Representative Theory (Cambridge: Cambridge University Press, 1977), 5.

[4] Ibid., 54.

> and feeling water, we are seeing, tasting and feeling a conglomeration of $H_2O$ molecules.[5]

If we want to include this as a separate type of seeing, we may label it 'seeing$_u$', where the subscript 'u' is to remind us that it is an unrestricted type of seeing. Sellars, however, rejects this approach as trivial.[6]

(2) Opaque (epistemic) perception requires an inference from 'S sees D' to 'S believes that he sees D'; while simple seeing does not.

(3) Dretske's criterion for simple seeing is that D be visually differentiable.

Apparently Chisholm also allows for this kind of seeing when he writes:

> there is no paradox involved in saying that a man *sees* a dog without taking what he sees to *be* a dog. It may be, however, that we should hesitate to say that he sees a dog if he didn't take it to be anything at all.[7]

(4) Simple seeing also allows for a person seeing$_n$ something and yet not being aware of seeing$_n$ anything. This may happen in what is called subliminal seeing. For example, suppose the a number is flashed on a television screen at a speed below the threshold of conscious dis-

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[5] James Cornman, *Materialism and Sensations* (New Haven: Yale University Press, 1971), 65.

[6] Wilfrid Sellars, "Is Scientific Realism Tenable?" *Proceedings of the Philosophy of Science Association* 2 (1976), #34.

[7] Roderick Chisholm, *Perceiving: A Philosophical Study* (Ithaca: Cornell University Press, 1957), 150.

crimination. We then ask the person to tell us a number that comes to his head. If he comes up with the number flashed, there is reason to say he saw it subliminally or subconsciously.

(5) I take it that Dretske accepts the following analysis of seeing$_n$:

> 'S sees$_n$ D' entails 'D appears$_n$ f to S' (in which 'appears$_n$' is a non-epistemic appearing).

Because cases can be imagined where a person can visually differentiate something, as in an after-image, yet not be causally stimulated by stray radiation hitting his eyes, which in this case the cause may be internal neuronal activity, it follows that the normal conditions of seeing are only contingently related to seeing$_n$.

On the basis of such cases, Dretske explicitly remarks that the substitution instances of 'D' are not to be restricted to physical objects, but may include such things as after-images, mirages, phosphenes, and hallucinations.[8] Consequently he also rejects all causal analyses of seeing$_n$; in particular, he rejects Chisholm's analysis in Perceiving,[9] saying that Chisholm's analysis does not reflect common sense use.[10]

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[8] Dretske, Seeing and Knowing, 22.

[9] Chisholm, Perceiving, 150.

[10] Dretske, Seeing and Knowing, 23, 52.

Dretske's critics have taken issue with this characterization of this non-epistemic or simple seeing. One issue is whether no beliefs whatever, or no particular beliefs are entailed by 'S sees(n) D'. As I understand this, Dretske requires that the subject of non-epistemic perception have the capacity to have conceptual responses to his experiences, including the capacity to have beliefs. But no particular belief is entailed or relevant.

In general, then, although I have divided perceptual reports by considering their forms into propositional and non-propositional perception, the form itself may be misleading as to the logical status of such reports. Logically speaking,

S sees D.

is either an elliptic propositional report, which can be expressed as 'S sees that this is D', or it is a case of simple seeing.

## II. SELLARS' POSITION

I will now examine Sellars' position in terms of the distinctions that I have made. Does Sellars' position fall within these rubrics? The answer is that he is, for the most part, conscious of these distinctions and has a place for them.

He remarks that the problem of perception can be viewed as an epistemological problem or as an explanatory (constitutive, causal, ontological) problem.[11] The epistemological problem concerns the analysis and justification of perceptual reports, and here the relevant forms are those of propositional perception. By contrast, the constitutive problem involves explaining the ontological conditions for the possibility of both veridical and unveridical propositional perceptual claims, and here the non-propositional non-epistemic forms are relevant. In fact Sellars' concerns about whether the sensa (sense data) or sensing (adverbial) theory is correct is a problem about the status of non-epistemic perception. And although the constitutive problem of perception plays a major role in Sellars' philosophy, he does not call it the "problem of perception."[12] The traditional problem of perception, he tells us, is an epistemic problem.

In view of this bifurcation, Dretske's attempts to give an 'analysis' of primary epistemic seeing in terms of a non-epistemic seeing in the following way:

S sees that D is f =
(1) D is f.

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[11] Sellars,"Is Scientific Realism Tenable?" #28.

[12] Ibid., #29.

(2) S $\text{sees}_n$ D.
(3)
The conditions under which S $\text{sees}_n$ D are such that D would not look, L, the way it now looks to S unless it was f ('L' represents the totality of appearances of D to S).
(4)
S, believing the conditions are as described in (3), takes D to be f.[13]

This would be rejected by Sellars as an analysis--on the ground that epistemic facts cannot be analyzed by non-epistemic facts. However, Sellars could (with qualification) accept this as an explanation.

Classical approaches to perception have tended to appeal to appearances, without clearly distinguishing analyses from explanations. But exactly how to construe this appeal, and to determine the entailments is tricky. Sellars, in a rare expression of confidence, writes that the pendular swing of philosophical controversy about the problem of perception can be made to stop because "the tools are at hand for a decisive clarification of traditional puzzles about perceptual knowledge."[14] I am not so confident.

## III. EPISTEMOLOGICAL PROBLEM

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[13] Dretske, Seeing and Knowing, ch. 3.

[14] Wilfrid Sellars, "Phenomenalism," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 60.

The epistemological problem is to analyze both veridical and unveridical cases of perception. And to determine whether analysis provides us with what can be used as foundations for empirical knowledge. In view of the possibility of unveridical perceptions of physical objects, if there are to be foundational perceptions, they must surely be, in some sense, minimal. So the issue of perceptual analysis is, as I see it, a question of perceptual reduction or minimalization.

Let us start with a veridical opaque propositional perceptual reports that S sees that this D is F, e.g., S sees that this apple is red. In several essays, Sellars distinguishes within the propositional content a component that is presupposed or _believed in_--namely, the subject of the thought, D; and the component which is _believed that_---namely, the predicate, F, of the thought.[15] His reasoning is that in a case such as seeing that this ice cube is pink, I presuppose that I am looking at an ice cube. And I may have learned this not on the basis of seeing, but because you told me it was ice. So, presupposing it is an ice cube I am looking at, I see that it is pink.

How can such reports be minimalized? I will summarize Sellars' position as a series of steps, and offer commentary. The first step in his analysis is to say that, at least for opaque objects, we can distinguish the object and its parts. Sellars says that what we see of the object D is actually part of D--the facing surface, D′--and we may see that D′ is F.[16]

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[15] Wilfrid Sellars, "Sensa or Sensings: Reflections on the Ontology of Perception," _Philosophical Studies_ 41 (1982), 87, #17.

The above formulation is a bit coarse because it conceals distinctions. The question comes to whether the following inference is valid:

S sees that D is F. (opaque form)

D′ is a part of D.

D′ is F.

Therefore, S sees that D′ is F.

This obviously won't do because there are hidden parts---like the inside of an apple which is not seen even if we tried noticing it. So the way to overcome this objection is to add a premise, namely,

D′ can be seen by S.

Now the problem is that although S could see D′, yet he may not be paying attention to any part of or any specific part of D; so that as a matter of fact he does not notice D′. So we have to add the premise,

S notices D′.

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[16] Sellars, "Is Scientific Realism Tenable?" #37; idem, "Sensa or Sensings," 84, #5.

But D′ itself may have parts which are not F; so even if S notices D′, it does not follow that S notices that D′ is F. So what we actually need is a new perception, namely,

S sees that D′ is F.

But this line of reasoning shows that it is not the case that ′S sees that D is F′ (in the opaque sense) implies ′S sees that D′ is F′. What it shows is that ′S sees that D′ is F′ is a new perception.

Sellars seems to be mixing epistemic and non--epistemic uses of perception. His remarks makes sense with the transparent mode of propositional perception. But even here some of the above qualifications apply

S sees that D is F. (transparent form)

D′ is a part of D.

D′ is F.

S can be seen by S.

Therefore, S sees that D′ is F. (transparent form)

The transparent mode of perception requires for its explanation the inclusion of non-epistemic perception, such that ′S sees that D is F′ implies ′S $\text{sees}_n$ D′.

Yet in some sense it is true that I see that D is F because I see that D′ is F. But to say this is to depart from giving an analysis to giving an explanation. Jackson handles this problem nicely by introducing the ′in virtue of′ relation.[17] It is meant to express, at least for part-whole relations, that the whole is a whole because (in virtue of) the parts standing in certain relations to each other. So the above line of reasoning would be transposed to the claim that S sees that D is F in virtue of seeing that D′ is F.

But we can maintain the epistemic relation between the opaque forms of perception of wholes to the perception of parts by noting the possibility of switching perceptions from wholes to parts. Call this perceptual reduction.

This whole-part problem presents additional difficulties. How much and what parts of an opaque object have to be seen before we can say that we see the object? This is a difficulty because we never see the whole object with its inside and back; but only a part and facing surface.[18] Descartes, for example, tackled this problem when he wondered whether he saw people below on the street as he watched from an upper floor window, because what he saw were moving cloaks.[19] Sellars does not discuss the above problems, but his explanation of perceptual reports is consistent with these considerations.

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[17] Jackson, Perception, 15.

[18] Perhaps an exception is Sellars′ pink ice cube.

[19] See Roderick Firth, "The Men Themselves; or The Role of Causation in our Concept of Seeing," in Intentionality, Minds, and Perception, ed. Hector-Neri Castañeda (Detroit: Wayne State University Press, 1967): 357-382; Chisholm, Perceiving, 153-156; Jackson, Perception, 19-20.

However, in his endeavor to provide an analysis, he goes on to distinguish parts from properties of physical objects. And within properties he distinguishes between the dispositional or causal properties, on the one hand, and the occurrent properties (Aristotelian proper and common sensibles), on the other.[20]

The second step in his analysis is to claim that we do not see the causal or dispositional properties; we only see the occurrent ones.

As a sympathetic reconstruction of Sellars' intentions, his combined claim would be that when we look at D, we can through perceptual reduction see D′ of D, and we can see that D′ is F (where 'F' is an occurrent property). So, for example, when we look at a red apple, we can see of it it's facing surface and we can see that it is red.

## A. APPEARANCE TALK

The next problem in analyzing perceptual claims is to find a place for appearance talk. Without rehashing the arguments from illusion, considerations of the causal chain in perception, the time-lag argument, and so on, I simply assume that there are cases of unveridical perception. When we talk about unveridical perception, it must be to indicate a failure of one of the modes of epistemic perception we have distinguished, namely an opaque or transparent forms of propositional perception; or the epistemic form of non-propositional perception. But it seems to make no sense to talk about an unveridical mode of non-epistemic perception.

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[20] Sellars, "Is Scientific Realism Tenable?" #30.

Unveridical perception or doubt of the veracity of perception is normally signalled by the use of 'appear' words. These are such words as 'seems', 'looks', 'feels', 'smells', 'sounds', 'tastes', and their cognates. The generic form of these words are 'appear' and 'seem'. But we should distinguish between perceptual and non-perceptual uses of appear words.

Chisholm has distinguished three uses of appear words,[21] and Sellars has expressed agreement at least with the distinctions--if not with their analyses.[22] The first use of appear words is epistemic and distinguished by sanctioning the inference from 'D appears to be F to S' to 'S believes that D is F'. The role of 'appears' in this use is synonymous with 'seems'.[23] It is used primarily as an expression of judgment e.g., 'It seems that D is F' is equivalent to 'I judge that D is F'. C. Mundle, in a similar vein, talks about as 'estimative use' of 'seems', as, for example, 'It seems that this is larger than that'.[24] By contrast, the use of 'appear', though synonymous with the use of 'seem' in some contexts, has generally different uses.

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[21] Chisholm, Perceiving, ch. 4.

[22] Wilfrid Sellars, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Company, Inc., 1975), 309, #53.

The second use of appear words distinguished by Chisholm is comparative. Using the comparative sense, from sentences such as 'D appears F to S' we can infer 'D appears like F-things usually do (in standard or optimal contexts)'. The third use of appear words is noncomparative. This use does not allow the types of inferences sanctioned by the epistemic or comparative uses. For example, if 'D appears F to S' and S suspects, let's say, some abnormality in the lighting, then S may not believe that D is F. As to the relation of phenomenal uses of appear words to the comparative uses the situation seems to be this. Comparative uses of appear words presuppose noncomparative uses.

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[23] This was also pointed out by John Austin, Sense and Sensibilia (New York: Oxford University Press, 1964), 36-37.

[24] C.W.K. Mundle, Perception: Facts and Theories (London: Oxford University Press, 1971), 16.

I suspect that Chisholm's noncomparative use of appear words has two species, but which Chisholm does not distinguish at the appropriate place of his discussion. One subspecies can be identified with what Sellars generically refers to as 'ostensible perception', which has the species 'ostensible seeing', 'ostensible hearing', etc., to correspond to various sensory modes. To say that there is an ostensible perception is to indicate a suspension of judgment as to whether a perceptual report is true or not. Sellars put it this way:

> P ostensibly sees a cube of pink facing him/her edgewise as a cube of pink facing him/her edgewise is, for our purposes, identical with the idea that
>
> There appears to P to be a cube of pink facing him/her edgewise.[25]

We could also characterize it as the use of a perceptual report with the achievement sense suspended. Firth's use of the term 'percept' in his "Sense-Data and the Percept Theory", I take it, is synonymous with Sellars' 'ostensible perception'.

The other subspecies of noncomparative uses of appear words is what Chisholm in his Theory of Knowledge calls the "descriptive, phenomenological use."[26] The objects of phenomenological appearances are the proper and common sensibles of Aristotle.[27] Frank Jackson calls this the phenomenological or, for brevity, the phenomenal use, which is characterized "by being tied to terms for color, shape, and/or distance."[28]

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[25] Sellars, "Sensa or Sensings," 89, #29.

[26] Roderick Chisholm, Theory of Knowledge (Englewood Cliffs: Prentice-Hall, 1966), 32.

## B. CRITICISMS OF THE DISTINCTIONS

Those who are opposed to the introduction of sense data as phenomenologically given (and hence as essential to a foundationalist view of empirical knowledge) have realized that the first step in the defense of sense data is to recognize the distinct character of phenomenal appearance talk, and have tried either to eliminate phenomenal talk altogether or reduce it either to the epistemic or the comparative use, or have claimed that phenomenal talk is inscrutable. Jackson mentions the following philosophers who take these approaches: J. Bennett, D. Armstrong, J. W. Roxbee-Cox, and G. Pitcher. According to Jackson, Bennett offers a radical reduction to the comparative form. Bennett, according to Jackson, claims that 'x appears y to S' implies 'x produces in S the kind of sensory state S usually is in when he perceives x as y'.[29]

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[27] Ibid., 32.

[28] Jackson, Perception, 33.

[29] Ibid.

Pitcher and Roxbee-Cox offer an epistemic reduction, as follows: 'x appears y to S' implies 'S acquires belief z' or 'S causally receives belief z' or 'S believes z'; 'x appears y to S' implies 'S believes x is y' or 'S is inclined to believe that x is y' or 'S has a suppressed inclination to believe that x is y'.

According to Jackson, Armstrong offers a counterfactual epistemic analysis. He says that 'x appears y to S' is equivalent to 'But for the fact that S had other, independent, beliefs S would have acquired the belief that x is y'.[30]

Richard Rorty too offers an epistemic reduction. He writes:

> For the appearance-reality distinction is not based on a distinction between subjective representations and objective states of affairs; it is merely a matter of getting something wrong, having a false belief.[31]

Another attack on the phenomenal use of appear words--a move, I may point out, not sanctioned by Sellars--is to take a skeptical stance about the possibility of demarcating them. We find Dretske, who is probably thinking of Goodman's grue paradox, expressing the following skepticism: "I know of no non-circular way to specify what is to count as a visual characteristic."[32] Sellars, by contrast, cites Aristotle's proper and common sensibles as the appropriate occurrent sensorial properties. But he insists that they always have a physical sense in perceptual contexts.

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[30] Ibid., 40.

[31] Richard Rorty, Philosophy and the Mirror of Nature (New Jersey: Princeton University Press, 1979), 77.

As far as I can tell, Sellars' efforts against the introduction of phenomenal sense data, and, hence, against foundations of empirical knowledge are crystallized in his denial of a phenomenological or phenomenal use of appear words. In his polemics against Chisholm, Firth, and Cornman, Sellars claims that it is either synonymous to 'ostensible perception', or that such a use of appear words does not exist, or that it is a contrived use to describe non-conceptual states.

Sellars' approach to this issue of analyzing perceptual reports can be developed on the basis of analyzing the following three statements from Sellars (with some minor modifications on my part):

(a) S sees that D, over there, is F.

(b) It looks to S that D, over there, is F.

(c) It looks to S as if there were an F(D) over there.[33]

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[32] Dretske, Seeing and Knowing, 65.

Sellars considers the entailments of these three types of reports. Among these entailments he distinguishes a 'propositional content' and a 'descriptive content'.

## C. PROPOSITIONAL CONTENT

The propositional content entailed by all three reports is 'S has the thought that D, over there, is F'. The three reports differ in their implied judgments about this propositional content: (a) endorses it, (b) partially endorses it, and (c) does not endorse it.

Sellars' approach seems to suggest--at least for the appearance reports--that they are properly made only if they imply the D-or-D condition ('doubt or denial condition') as examined by H. P. Grice in his "The Causal Theory of Perception". According to this approach:

> When someone makes such a remark as "It looks red to me" a certain implication is carried, an implication which is disjunctive in form. It is implied either that the object referred to is known or believed by the speaker no to be red, or that it has been denied by someone else to be red, or that the speaker is doubtful whether it is red, or that someone else has expressed doubt that it is red, or that the situation is such that though no doubt has actually been expressed and no denial has actually been made, some person or other might feel inclined towards denial or doubt if he were to address himself to the question whether the object is actually red.[34]

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[33] Sellars, "Philosophy of Mind," 151.

The question Grice asks is whether there is a use of such expressions as 'It looks red to me' where the D-or-D conditions are missing. In other words is there a distinct phenomenal use of appear words? To settle this question, Grice distinguishes four types of implications, and considers four different possible vehicles of implications:

> (a') what the speaker said (or asserted), or (b') the speaker ("did he imply that . . ."), or (c') the words the speaker used, or (d') his saying that (or again his saying that in that way); or possibly some plurality of these items.[35]

Instead of following Grice in his exposition, we can invoke a distinction that Sellars uses between what he calls semantical or S-assertibility[36] and dialectical or D-assertibility.[37] S-assertibility consists in those statement utterances which are sanctioned by formal and material rules of implication. D-assertibility, on the other hand, consists of those utterances "grounded in the requirements of unambiguous communication."[38]

Grice is, in effect, classifying (a') as an S--assertible utterance, and the rest as D-assertible utterances. D-assertibility is determined by background rules

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[34] H.P. Grice, "The Causal Theory of Perception," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New York: Anchor, 1965), 441.

[35] Ibid., 445.

[36] Wilfrid Sellars, Science and Metaphysics: Variations

of what may be called normality, sincerity, and appropriateness. It probably involves standards of etiquette and ethics. Within such a background or context, it makes a difference who says what to whom, when, where, etc., etc. In any case, normally one does not say 'It looks red to me' in an informative manner unless the D-or-D conditions are satisfied. But I think this applies to any remark which would communicate something that is obviously seen or known. For example, suppose everything is normal and it is obvious that we are both looking at a red ball, what would be the point of my saying to the other person 'This is a red ball', if I know that he knows that it is a red ball, and I know that he knows that I know that it is a red ball? Saying it would express a truth, but it would be contextually or D-assertibly odd. Now it seems that the same sort of oddity would occur in the same context if I said 'This ball looks red'. It would be true, but pointless. There would be no S-assertible oddness in saying 'This ball looks red and I believe that the D-or-D conditions do not exist'. And if this is an intelligible thing to say, then there seems to be a phenomenal use of appear words.

Sellars disagrees. If I understand him correctly, he would say that if the D-or-D condition as an implication of an appearance statement is dropped, then you are left with a straightforward report that x or something, anyway, is F. In other words, the 'looks' use in this context becomes a contrived way of speaking for something being F.

We can glean Sellars' answer from how he analyses the following, which he takes to be a necessary truth:

> x is red. iff .x would look red to standard observers in standard conditions.

This seems like an analysis of 'x is red' in terms of' x looking red'. After all, the right hand side is composed of three claims which can be separated, namely 'x looks red to S in conditions C', 'S is a standard observer', and 'C are standard conditions'. And it also seems that the first conjunct could be further analyzed into 'x looks red to S' and 'the conditions are C'. And it also seems to be the case that the former conjunct can be analyzed as a triadic relation between x, red, and S.

Sellars disagrees with the above that 'looks' statements are analyzable, and this for the simple reason that 'looks' is not a relation word. It's logic is tied up with the presence or absence of standard observers and conditions. In that case, it would seem the use of 'looks' is tied to the seeing of something. And the focus of attention has to shift to primitive modes of seeing.

## 1. DESCRIPTIVE CONTENT

Sellars would agree that appear statements as well as perceptual reports imply, as he puts it, a common descriptive content, which would be that S sees that D is F on the condition that the propositional content is true and S knew that the circumstances were normal.[39] But Sellars admits that such a counterfactual analysis does not specify the occurrent descriptive content of the given reports.

He also notes that the common descriptive content can be called an 'experience'. But he immediately cautions us about the possible ambiguity between an experiencing and that which is experienced. Let us refer to these as 'act' and 'content' respectively. He concentrates on a description of the experienced content, and suggests first an externalist, comparative analysis, but rejects it as inadequate. He is troubled by how to characterize directly or intrinsically this content.[40]

To understand why Sellars is troubled we must be conscious of the alternative which is he trying to avoid. This alternative is the classical account that something--a sense-datum--is F. Keeping this as the terminus he is avoiding, Sellars--as a moth to fire--keeps returning to this issue.[41] The closest that Sellars comes to describing the descriptive content is when he writes: "If understood in a neutral way, Something, somehow a cube of pink in physical space is present in the perception other than as merely believed in.";[42] and: "Strictly speaking, in its character as perceptual object it consists of a volume of pink -- where 'pink' is, in Quine's sense, a mass term, a word for a kind of stuff."[43] Note that Sellars thinks that this reductive analysis still leaves us with physical matter in physical space. At best, according to Sellars, we have 'S sees a bulgy pink expanse'.

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[39] Sellars, "Philosophy of Mind," 152.

[40] Sellars, "Philosophy of Mind," 156.

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[41] Wilfrid Sellars, "Phenomenalism," in Science, Perception, and Reality;idem, "Philosophy of Mind;" idem, "The Structure of Knowledge: (1): Perception, (2): Minds, (3): Epistemic Principles," in Action, Knowledge, and Reality: Essays in Honor of Wilfrid, ed. Hector-Neri Castañeda (Indianapolis: The Bobbs-Merrill Company, Inc., 1975): 295-347; idem, "Sensa or Sensings: Reflections on the Ontology of Perception," Philosophical Studies 41 (1982): 83-114; idem, "Is Scientific Realism Tenable?" idem, "Giveness and Explanatory Coherence," The Journal of Philosophy 70 (1973): 612-24; idem, "More on Giveness and Explanatory Coherence," in Justification and Knowledge, edited by George Pappas, (Dordrecht, Holland: D. Reidel, 1979): 169-182; idem, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981): 3-90; idem, "Seeing, Seeming, and Sensing," in The Ontological Turn: Studies in the Philosophy of Gustav Bergmann, edited by M.S. Gram and E.D. Klemke, (Iowa City: University of Iowa Press, 1974): 195-215; idem, "Sensa or Sensings: Reflections on the Ontology of Perception," Philosophical Studies 41 (1982): 83-114; idem, "Seeing, Sense Impressions, and Sensa: A Reply to Cornman," The Review of Metaphysics 24 (1970-1971): 391-447.

[42] Sellars, "Sensa or Sensings," 89, #26.

[43] Sellars, "Is Scientific Realism Tenable?" 19. See also his "Carus Lectures," 21-22.

Reflecting on this, Sellars writes that this is a **minimal** account:

> So minimal, indeed, that it might be thought that my account hardly differs from the traditional view that what we perceive of objects are _sensa_ which somehow 'belong' to them.[44]

But he goes on to say that this account constitutes an explanation and not an analysis. I disagree. This account can do double service.

All Sellars is claiming is that the minimal account is conceptually tied to concepts of physical objects. But conceptual dependence is compatible with epistemic independence. The obvious example from Sellars' writings is the conceptual dependence of the Manifest Image on the Original Image. This is the claim that our concept of a physical object is a truncated concept of a person. But we can agree with that, and yet say that now we can use our truncated concept of a person to identify physical objects. In other words, for epistemic purposes the concept of a physical object is independent of the concept of a person.

By analogous reasoning, we can say that though minimal perception, which truncates causal properties and parts unseen, is conceptually dependent on the concept of a physical object, it is epistemically independent of seeing physical objects.

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[44] Sellars, "Is Scientific Realism Tenable?" #40.

What warrants Sellars calling the objects of minimal perception 'stuff' as a physical category? Recall that a physical object was characterized by (1) being in time, (2) being in space, and (3) having causal properties. But in the above account of perceptual analysis, step two required an abstraction from causal properties; so that a minimal perception was of an occurrent property located in space and time. But in calling something 'stuff' suggests that it has causal properties. So it seems Sellars' account is either inconsistent, or he is using the word 'stuff' in the sense of parts; but again the sense of 'parts' cannot be in the sense of causally integrated parts, but merely the sense of spatially and temporally distinguished parts. But what is the point of calling the objects of minimal perception a physical entity? The only physical properties that we are aware of are location in space and time. But that sort of entity is no different from the sense datum of classical perception theory. Moreover, calling the object of such minimal perception either subjective or objective would also be improper since that would presuppose knowledge of the causal connections into which these entities enter. So neutralized, the minimal perception that Sellars is talking about becomes identical to Lewis' 'given' for which "a distinction between the subjective and the objective . . . is irrelevant to givenness as such."[45] I would also point out that the given would be neutral between being $\text{physical}_1$ and $\text{physical}_2$ since that distinction is a function of causal connections.

Concretely, if Sellars means to claim that the predicate 'pink' in analyses cannot be reduced to anything more basic than physical pink stuff, as long as the word 'physical' does not carry causal implications, we can say, with Lewis, that the pink is given.

## 2. RE-EXAMINING THIS CONCLUSION

If my interpretation is unacceptable to Sellars, it must surely be that I have overstepped the boundaries of analysis and have entered the realm of theory and explanation. But, in that case, I am puzzled where the demarcation point is. If there is to be a reductive analysis for Sellars, it must be based on a model of something public in the Manifest Image. Such a model is a physical object or the facing surface of a physical object. So why won't this do an a model?

It is clear that sense impressions as posited unapperceived entities are theoretical entities, but I am not sure whether Sellars would call the result of a phenomenological reduction a theory as well. In any case, it is clear that Sellars believes there is a limit to phenomenological reduction. I would raise the question, then, whether if that limit is overstepped we get into the realm of theoretical positing? Is there a limit to acceptable abstraction or truncation? Is this resistance consistent with Sellars' principles? It could be objected that Sellars is dealing only with the perception of physical objects and not with such subjective phenomena as after--images, hallucinations, and such. So that his analyses of the former do not apply to his analyses of the latter. But I think it would be wrong to take this tack. For Sellars concepts of subjective states are learned by analogy with concepts of physical objects. So it would seem that even subjective states have an irreducible physicality to them. After all our subjective states are felt as states of our bodies. Pain, for example, is located in parts of our bodies. Even phantom limb pains seem to be located in physical space.

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[45] Lewis, Mind and the World Order, 63.

Sellars conclusion is acceptable in part as a phenomenological description of both our perceptions of physical objects, and of our subjective experiences as appearing to be located in physical space. This much is conceded by Firth in his examination of the percept and sense data theories.[46] Firth's 'percept' is what Sellars calls an 'ostensible physical object'. However, both Sellars and Firth ignore the availability of such subjectless events as flashes of light or the claps of thunder as models for sense data, or as subject of perceptual reduction. Given such a model we do not need to abstract the properties of physical objects from the causal dispositions of the physical substance. Subjectless events are ideal for this. Sellars recognizes this, but uses these models for theoretical construction. My point is that these models can be used for phenomenological purposes.

## 3. RESTRICTIONS

Let us see how Sellars places restrictions on phenomenological reduction. In the essay "Phenomenalism" he is considering three models by which to form a concept of sensing a sense datum. The first model he uses is that of seeing the facing surface of a physical object. Since I believe, contrary to Sellars, that this model will do, I will examine his reasoning for rejecting it.

> Such perception-theoretical expressions as 'directly see', 'directly hear', etc., are given a logic which parallels, in significant respects, the logic of the verbs 'to see', 'to hear', etc., as they occur in everyday perceptual discourse. Thus, to such statements as

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[46] Firth, "Percept Theory."

> Jones saw a book and saw that it was blue.
>
> there correspond such statements as
>
> Jones directly saw a bulgy red expanse and directly saw that it was bulgy and red.
>
> And just as seeing that is a specific form of knowing that, a variety of observational knowledge, of observing or perceiving that, so directly seeing that is construed as a variety of directly observing or perceiving that, and, hence, as a specific for of directly knowing that. Again, just as seeing x is a form of perceiving x, so directly seeing is introduced as a specific form of directly perceiving x, or, as the term is introduced, sensing x.[47]

So far, I have no objections. However his following claims are dubious.

(AT)

> The fact that 'sensing x' is introduced on the model of 'perceiving x' as ordinarily used brings with it a number of implicit commitments not all of which can be dodged without cutting the theory off from the roots of its meaning.[48]

Let me remind the reader that Sellars, writing on another occasion about models and theories, stressed that a theory is constructed by using positive, negative, and neutral analogies.[49] Moreover he made a distinction between material (or first-order) and formal (or second-order) analogies. Given these analogical resources, there is much leeway in the construction of theories on the basis of models. A theory is, then, introduced on the basis of a model and what Sellars calls a 'commentary'. A commentary is simply the statement indicating which features are similar, different, neutral, and the order-level which is operative. In view of this, how are we to deal with the last cited passage? Sellars seems to be suggesting that a number of similarities have to be included if the model is to be used at all. To make sense of this, I will interpret Sellars to be making the following presuppositions:

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[47] Sellars, "Phenomenalism," 67.

[48] Ibid., 67.

[49] Wilfrid Sellars, "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation," in Philosophical Perspectives.

(1) The model has an essence.

(2) All or some of the essential properties must be included in the positive analogy.

My concern is with (2). Let me cite an example of categorial refinement which Sellars uses and which seems to violate this prescription. He speculates that the Manifest Image is the result of introducing the concept of a physical object by truncating the concept of a person. Specifically a person's actions are spontaneous or habitual. A physical object is derived from the concept of a person by truncation the spontaneous actions--leaving only habitual actions. Now if the truncated property of spontaneous activity is essential to the concept of the model (i.e., a person), then isn't the introduction of physical objects a result of "cutting the theory off from the roots of its meaning"? If it is, I find nothing objectionable in this. So Sellars must have something else in mind.

Frank Jackson has a related worry. He considers truncating the concept of red from the concept of being colored:

> Suppose someone writing on secondary qualities who observes that 'X is red' entails that X is colored, and decides to introduce the term 'red*' to mean precisely what 'red' means except that 'X is red*' does not entail that X is colored.[50]

If this is the sort of truncation that Sellars has in mind which would be a "cutting the theory off from the roots of its meaning," then I agree that these kinds of implications cannot be removed. But I don't see that this applies to the model of a physical object.

The problem seems to be to decide how to preserve the intelligibility of a theory when using negative analogies with a model. I suppose the problem is analogous to the problem of how much of the Cheshire cat can we remove before it is absurd to say that there is a smile on (of) a cat. This would suggest that we must preserve at least a subject-predicate form.

Let's reflect on another use of analogy is Sellars that caused difficulty. Bruce Aune[51] found difficulty in accepting Sellars' facing surfaces of physical objects as models for sense impressions. Facing surfaces are, after all, things; yet Sellars conceived sense impressions as states of persons. Such a trans-category analogy seemed absurd to Aune. The reason Aune had for saying this is that the logical form of the surface and the physical object is a subject-predicate form, 'Fx'; while the logical form of a person having a sense impression seemed to Aune to have a relational form, 'xRy'. Sellars correction was to give an adverbial analysis of a person having a sense impression, as, for example, 'person S sensing redly', so that this formulation too had a subject-predicate form.

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[50] Jackson, Perception, 5.

[51] Bruce Aune, "Comments on Sellars' 'Phenomenalism'," in Intentionality, Minds, and Perception, edited by H-N. Castañeda (Detroit: Wayne State University Press, 1967).

The upshot of this discussion seems to be this. In using analogies for theoretical purposes, formal analogies must be preserved.

With these precautions in mind, lets examine what implications Sellars has in mind for physical objects as models for sense data which cannot be rejected without "cutting the theory off from the roots of its meaning."

One such commitment rests on the fact that in ordinary perceptual discourse the consequence from saying that

Jones saw a book.

to

There was a book (i.e., the one that Jones saw).

is valid. The theory, thus introduced, brings with it, therefore, a commitment to the consequence from

Jones sensed a red and triangular expanse

to

> There was a red and triangular expanse (i.e. the one that Jones sensed).[52]

I find nothing wrong with this. It is a variation of the Sense-Datum Inference, which I will defend against its alleged refutation by Chisholm--a refutation apparently accepted by Sellars.

> Another commitment rests on the fact that in ordinary perceptual discourse the objects of perception typically exist before they are noticed and after we have turned away; in short they can and do exist unperceived. The theory, introduced on this model, brings with it the implication that the red and triangular item which Jones sensed is capable of existing unsensed.[53]

Again I find nothing objectionable here except for an ambiguous use of the term 'sensed'. In one use, it is synonymous with 'noticed'; in another, it could be construed as a state of the person. Sellars is trading on this ambiguity. If the analogy with the seeing of the surface of physical objects is to apply, 'sensing' must be interpreted as 'noticing'.

> Other implications are that items which are sensed can appear to be other than they are, and that the fact that a sensed item is red and triangular can no more depend on the fact that someone senses that it is red and triangular, than the fact that a table is round and brown depends on the fact that someone perceives that it is round and brown.[54]

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[52] Sellars, "Phenomenalism," 67.

[53] Ibid., 68.

[54] Ibid., 68.

I cannot allow such an implication. Allowing it would lead to an infinite regress. One of the reasons for introducing sense data is to explain how it is possible for things to appear other than they are. And the explanation is that there is something which actually has the apparent property. Now if sense data could appear other than they are, this would require positing a second sense datum which actually has the apparent property. And the process could be repeated for this sense datum as well, and so on to infinity. So it is necessary to introduce a negative analogy here. Sense data are not entirely like physical object in this respect. And I don't see how denying this implication leads to the kind of absurdity illustrated by Jackson in proposing to remove the concept of color from the concept of red, or to a trans-categorial analogy against which Aune objected.

## D. SENSE-DATUM INFERENCE

The next issue I wish to examine concerns Chisholm's sense-datum inference. What superficially seems to be one strand of thought, turns out to be three. The first is Chisholm's denial that the locution

(I) 'D appears f to S' entails 'There is something which is f'

What is the nature of this entailment? Is it to explain, as Sellars wants, the existence of perceptual propositional attitudes? Anyway, something like this inference is called the "sense datum inference" in Chisholm's "The Theory of Appearing."[55]

To illustrate the invalidity of (I) he cites examples which have, save one, the form

(II) 'D appears f to S' entails 'There is anappearance which is f'

Notice that the conclusion of (I), unlike that of (II), is non-committal on the category of the subject. The term 'something' is a transcendental term (in the scholastic sense) applicable across categories. Whereas the term 'appearance' may or may not carry some categorial baggage. So schema (II) is or is not equivalent to schema (I).

Whether schema (I) is considered valid by Sellars is puzzling. From such cases as 'D appears f' he is willing to infer that

> something, in some way red is in some waypresent to the perceiver other than as thought of.

And adds, "This does not mean that I accept the "sense datum inference."[56] Again in Science and Metaphysics, he repudiates this inference for a contrasting 'sense impression inference':

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[55] Roderick Chisholm, "The Theory of Appearing," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New York: Anchor, 1965), 173.

[56] Wilfrid Sellars, "The Identity Approach to the Mind-Body Problem," in Philosophical Perspectives, 382.

> Unlike the latter [sense datum inference], the 'sense impression inference' is not a matter of explaining the fact that an object looks red (or that there looks to be a red object) in terms of the idea that there is something, a sense-datum, which is red; for a sense impression of a red rectangle is neither red nor rectangular.[57]

So it is clear that Sellars rejects the sense-datum inference. But it is not entirely clear for what reason.

Since Chisholm provides reasons for rejecting the sense-datum inference (and Sellars is aware of this), perhaps he accepts Chisholm's refutation.

Chisholm's refutation consists of claiming that an argument of the schema-form (I) is not valid because it has the following counterexamples.

(a) 'That animal looks centaurian' entails 'There is something centaurian'

(b) 'The pail feels empty' entails 'There is an appearance which is empty'

(c) 'The woods sound inhabited' entails 'There is an appearance which is inhabited'

(d) 'The curtain appears green' entails 'There is appearance which is green'.[58]

Elsewhere, he gives the following counterexamples:

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[57] Wilfrid Sellars, Science and Metaphysics: Variations on Kantian Themes (London: Routledge and Kegan Paul, Ltd., 1967), 17.

[58] Chisholm, Perceiving, 115-116.

(e) 'The man appears tubercular' entails 'The man presents an appearance which is tubercular'

(f) 'The books appear worn and dusty and more than two hundred years old' entails 'The books present appearances which are worn and dusty and more than two hundred years old' entails'.[59]

What Chisholm accomplishes with these counterexamples, except for (d), is to show that not all uses of appear words can be used in this inference form. All of these appearance words, except for (d), are cases either of Chisholm's epistemic or comparative uses of appear words. Only example (d) exhibits a noncomparative use of an appearance word. And example (d), smuggled in with the other examples, is made to appear illegitimate by association. But we can resist this attempt at contamination. I find nothing wrong with example (d).

To secure the sense-datum inference against such counterexamples, we only need to specify that the valid inference form is to be restricted to what Chisholm called 'phenomenological' or 'phenomenal' uses of appearance words. And then only example (d) qualifies.

So modified, the only objection Chisholm has to the sense datum inference is that the conclusion contains the reifying words 'something' and 'appearance'. So his proposal is, in effect, to modify the formulation of the conclusion so as to exclude substantive terms. He opts for an adverbial formulation. So example (d) would be modified to 'The curtain appears green' entails 'I am appeared greenly to'.[60]

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[59] Chisholm, Theory of Knowledge, 95.

Sellars position here is that although 'The curtain appears green' can be phenomenologically reduced to something, in some way green is in some way present to the perceiver other than as thought of. By this he means that some physical stuff is seen. He intends to emphasize that there is no perceptual category available other than that of physical things. He also means to hold that appearance statements are not analyzable, because they do not express a relation between a person and something else.

Schemata (I) and (II) should be contrasted with what is also called the 'sense-datum inference' in Perceiving. The schema of this inference is illustrated by Chisholm in the following steps:

(III) (1) 'He sees a boat' entails (2) 'A boat appears in some way to him.' (2) can be transformed to (3) 'A boat presented him with an appearance,' which entails (4) 'He sees an appearance.'[61]

Chisholm rightly objects to the inference from step (3) to the conclusion (4), especially if one has a tendency to make the further conclusion: (5) 'He does not see a boat'.

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[60] Ibid., 34.

[61] Chisholm, Perceiving, 151.

But I think the reason for objecting to this inference is for equivocating on the word 'see'. Those who have been interested in making such an inference have used two well known techniques. The first technique is to distinguish the uses of 'see' in (1) and (4). The distinction introduced is between what can be '$\text{seen}_d$' directly (which would apply to (4)) and what can be '$\text{seen}_m$' mediately (which would apply to (1)). According to this view, medium sized specimens of dry goods are always mediately perceived; while appearances are directly perceived. The second technique--actually a variation of the first--is to substitute for 'sees' in (4) the term 'senses'. Once these equivocations are taken care of the inference pattern is acceptable, provided that phenomenal appearances are involved.

However, there is another equivocation that must be guarded against in the sense datum inference. Consider example (d). Suppose (i) the curtain is green, (ii) the curtain looks green, and (iii) an appearance is green. As Chisholm himself points out we have to distinguish a dispositional use of color words when applied to physical objects, from a phenomenal occurrent use. However, a $\text{seeing}_m$ of physical green entails $\text{seeing}_d$ phenomenal green

## E. INTENTIONALITY OF SENSATIONS

One of Sellars' major criticisms of Western philosophy is, as he puts it, the assimilation of sensations to the conceptual order. This, he says, is a fundamental mistake. A root cause of this mistake is due to being misled by a grammatical analogy between the phrases

a sensation of a white triangular thing

and

a thought of a white triangular thing.

This, according to Sellars, is a doubly misleading analogy. First, the grammatical similarity suggests that sensations are species of thinking, which they are not; second, the grammatical similarity suggests that having a sensation is a relational fact between a person and a sensation, which it is not. These two tempting suggestions, says Sellars, must be resisted. (1) Sensations themselves, according to Sellars, are non-cognitive; although they can be the objects of cognitions, as, for example, when I know that I have a pain. (2) And having a sensations is not a relation between a person and a sensation; rather, sensations are adverbial states of a person.

Both of these contentions have been denied by Sellars' critics. Sellars' denial that sensations are cognitive has been challenged by Romane Clark, while Sellars' adverbial analysis has been challenged by, among others, Frank Jackson. Here I will examine claim (1). I examine claim (2) under the heading Ontology of Perception.

Romane Clark has now written several essays devoted to this topic. He specifies his difference with Sellars by way of how they handle the following triad of claims:

(1) Perceptions are judgments (thoughts).

(2) Sense impressions are constituents of perceptions.

(3) Sense impressions are not conceptual or cognitive items.

He goes on to claim that Sellars would accept (1) and (3) but deny (2). Clark, on the other hand, accepts (1) and (2) but denies (3).

There is, however, a sense in which Sellars accepts (2). Sellars says that sense impressions are the necessary causal conditions of perceptions.

> the direct perception of physical objects is mediated by the occurrence of sense impressions which latter are, in themselves, thoroughly noncognitive. Furthermore, this mediation is causal rather than epistemic. Sense impressions do not mediate by virtue of being known.[62]

For Clark the causal role of sense impressions cannot be exhaustive of their role:

> It is not as though a judgment exhausts the content of a perception with some correlated sense impressions serving as mere causal mechanisms, the material triggers for the occurrence of the judgment. For this would fail to distinguish perceptions from other judgments which may be materially induced by sensory stimulation, but which in no sense are perceptions,

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[62] Sellars, "Phenomenalism," 90-91.

> and which in no sense count as seeing what is judged.[63]

Clark points to a disanalogy between perceptions and thoughts: sensuous experiences outrun our capacity for verbalization. I may see the hue of a color but have no adequate word for its particular hue.

Sellars is conscious of these difficulties when he writes "Even if we take into account the fact that perception involves a causal dimension . . . we feel that the distinctive character of seeing has not yet been captured."[64] In addition, Sellars' answer is strangely at odds with what he said while discussing the thoughts of musicians and painters. There he said that these artists, in some sense, think in a sensorial medium:

> visual perception itself is not just a conceptualizing of colored objects in a certain context--but, in a sense most difficult to analyze, a _thinking in color_ about colored objects.[65]

In this essay Sellars provides no analysis of this claim. However, Clark, in insisting on the representational character of sense impressions, I believe, is providing such an analysis. Clark's claim amount to this. When Sellars says that people can think in color about colored objects, this is to be interpreted that sense impressions are acting analogously to the way predicates act in propositions. And this amount to interpreting claim (2) of the triad as saying that sense impressions are predicate components of perceptual judgments. As has been discussed in the chapter "Language and Thought", Sellars discussion of representational systems in animals is compatible with Clark's interpretation.

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[63] Romane Clark, "The Sensuous Content of Perception," in _Action, Knowledge and Reality_, edited by H.N. Castañeda (Indianapolis: The Bobbs-Merrill Co., 1975), 112.

[64] Sellars, "Structure of Knowledge," 306, #42.

[65] Ibid., 305, #37.

Clark's contribution is to dwell on Sellars' view that thoughts are analogous to speech, and to extend this analogy of speech to sense impressions as well. Speech, thoughts, and perceptions are analogous in three respects: all are intentional, all have truth values, and all are subject to reflexive, non-inferential knowledge.

> The model of sense impressions . . . is simply this: as predicates are to declarative sentences, as ascriptions are to assertions, as concepts are to judgments, as ascribing is to stating, so, too, sense impressions are to perceptions. . . . Sense impressions are the predicate "words" of perceptual, mental "assertions." . . . Thus, the occurrence of a sense impression is the predication of a sense quality to an object, and so it is in this way that sense impressions are cognitive or conceptual elements of sensuous beliefs.[66]

Clark explicitly states that his analysis applies only to 'basic perceptions'.

> These are basic in two senses: First, they are ascriptions of simple sensuous qualities. Second, they have no internal, logical complexity. Each is simply

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[66] Clark, "The Sensuous Content of Perception," 117.

> a (single) qualitative ascription to a (single) object of reference.[67]

and, "Basic perceptions we understand to be those sensuous judgments which ascribe the proper and common sensibles to what is demonstratively before one."[68] Clark notes that Everett Hall had made a similar claim, except that he wrote that "perceptions are descriptive or predicative throughout." To which Sellars responded:

> how [can] a pure perception. . . be a sentence, and yet be 'predicative throughout. . . . Must not pure perceptions contain expressions referring to an object in order to be able to characterize an object?[69]

To this objection Clark replies that Sellars is correct on insisting on a referring component, and provides the referential component with the following qualifications: First, basic perceptions are postulated idealizations "to account for the empirical basis of the acquisition of the more complex, but standard, forms of sensuous belief."[70] Second, the reference is carried demonstratively: "It is the material occurrence of the impression in the given context which provides the demonstrative reference of that experience,"[71] and

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[67] Ibid., 122-123.

[68] Romane Clark, "Sensuous Judgments," Nous 7 (1973), 53.

[69] Wilfrid Sellars, "The Intentional Realism of Evert Hall," in Philosophical Perspectives, 110.

[70] Clark, "Sensuous Content," 123.

> Sense impressions are rather special functions for they are defined only over a special and limited domain. They are functions taking the demonstrative references embodied in their own occurrences as arguments.[72]

Clark adds that Sellars' perspicuous language, Jumblese, provides the ideal model for basic perceptions. In this language there are no predicate expressions; the names are simply written in different styles. However, Clark concedes that the cognitive role of sense impressions is not given phenomenologically:

> It certainly does not follow from the fact that sense impressions are not themselves objects of epistemic acts in standard cases of perception, nor cognitions, that they play no conceptual role in sensuous judgments.[73]

Notice that Clark is using the term 'conceptual'. In view of the way I have demarcated non-conceptual representations and conceptual representations (in ch. 5), we must be clear that Clark means to make a case for sense impressions as playing a non-conceptual representational role. This is clear from the fact that he excludes logical connectors in sensuous judgments. And Clark is apparently conceding to Sellars the claim that sense impressions are not phenomenologically given. This leaves at least two possible ways in which they can play a representational role. The first way is that sense impressions are the objects or vehicles of unconscious cognitions; the second that they are potential objects or vehicles of conscious cognition.

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[71] Ibid., 123.

Richard Aquila, in commenting on Clark, seems to opt for the second interpretation: "All we need grant is that sense impressions are not themselves items which become 'mental words' in perception: rather they are merely potential tokeners of mental words."[74]

Firth's observations in his classical essay "Sense Data and Percepts" becomes pertinent here. He too said that from a phenomenological point of view only 'percepts' ('ostensible physical objects') are given; but called attention to the possibility of introducing an awareness of sense data through a 'perceptual reduction'. A perceptual reduction would be a learned mode of perception. When we reflect on the prescriptions given by Moore or Price for "directly perceiving" sense data, we can understand their recommendations in two ways: either they were prescribing how to pick out--perhaps by abstraction--sense data in ordinary perception; or they were prescribing an imaginative perception according to a recipe. In either case, they were not providing a description of what was pheno-

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[72] Clark, "Sensuous Judgments," 54.

menologically given, but specifying a possible mode of perception satisfying their criteria.

In his famous essay "Is There a Problem About Sense-Data?", G.A. Paul[75] failed to discern anything like Moore's sense data in phenomenological perception, and concluded that sense data were mythical. His mistake, in hindsight, was to believe that sense data were part of the phenomenologically given. Evidently he did not consider the possibility of alternative modes of perception.

## IV. ONTOLOGY OF PERCEPTION

Sellars works with the principle that all theoretical concepts (including introspective reports) must be introduced by analogy with concepts available in the Manifest Image. We can call this the Principle of Theory Introduction, or PTI. I will assume that PTI is correct.

** The subjects for ontological speculation, for Sellars, are the minimal perceptual propositional reports as 'S ostensibly sees a volume of pink stuff', or, as he puts it "Something, somehow a cube of pink in physical space is present in the perception other than as merely believed in."[76]

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[73] Ibid., 47.

[74] Richard E. Aquila, "Perceptions and Perceptual Judgments," Philosophical Studies 28 (1975), 27.

[75] Winston Barnes, "The Myth of Sense-Data," in Perceiving, Sensing, and Knowing, ed. R.J. Swartz (New

> According to the above account, perceptual experience is a unique blend of a conceptual and a non-conceptual state. The latter is required by what is not inappropriately characterized as the common sense conviction that even when there merely seems to be a physical object which is red and rectangular on the facing side in front of one, something which is _somehow_ a physical object which is red and rectangular on the facing side is present in the experience _other than as a mere object of belief_.[77]

He then tries to explain that the act-object and the adverbial theories of perception differ according to what they make of the above formulation:

> It is this conviction that, to put it differently, an actuality which is _somehow_ a physical object which is red and rectangular on the facing side is present in the experience which is, as I see it, the common sense core which the various forms of both act-object and adverbial theories of sensation attempt to build into a full-fledged theory. In other words they are, from this point of view, attempts to _pin down_ the place-holders 'something' and 'somehow' in specific matter-of-factual terms.[78]

In a footnote appended to the occurrence of 'something' in the first paragraph, he wrote, "Notice that 'something' is a transcendental so that 'somethings' are not limited to _objects_."[79]

The explanation consists, first, in theoretically positing the existence of sense impressions--in our case--of a pink volume. Using Leibniz' distinction between perception and apperception, Sellars writes that sense impressions as theoretical entities are never (consciously) apperceived, but that they are (unconsciously) perceived.[80] And since sense impressions are theoretical entities they must comply with the Principle of Theory Introduction--this means they must be introduced on some model.

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[77] Ibid., #90.

The consequence of this line of reasoning which assumes that there is no simpler category than the physical by which we have experiences--even though we know by theory that we are in fact reacting to sensa--is the conclusion that we are living in an illusory world. In "Sensa or Sensings" Sellars put it this way:

> If one thing is clear, it is that in perception we do not take what *in point of fact* . . . are sensa (or sensing) *to be* such. . . . Might we not, so to speak, *mis-categorize* them as items in the physical environment. Of course, such a taking would be a *mis*-taking.[81]

### A. THE EQUIVALENCE OF SENSA AND SENSINGS

Sellars holds an adverbial sensing theory in the Manifest Image and a sensa theory in the Scientific Image. The relation between these theories in Sellars' vintage writings has been to talk about a categorial transposition from sensing to sensa. However, I suspect, because of the recent concentration of attention to the logic of the adverbial sensing theory which has unearthed difficulties,

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[78] Ibid., #90.

[79] Ibid., #90.

[80] Sellars, *Science and Metaphysics*, 10.

[81] Sellars, "Sensa or Sensings," 109, #89.

Sellars has, in response, shifted his stand to what appears to me to be the claim that the sensing and sensa theories are (or could be made to be) logically equivalent.

I am not going to rehearse the logic of the adverbial sensing theory, but simply mention the course of criticisms which brought Sellars to his new position. The testing of the viability (possibility) of the adverbial theory was started by Frank Jackson[82] who introduced the so called Many-Property Problem. Sellars[83] responded to this criticism, and in the course of developing a logic of adverbial states uncovered another problem, the so called Identity Problem (or Co-incidence Problem). Thomas Vinci[84] reviewed the situation and introduced another difficulty by challenging Sellars' thesis that all talk about events is reducible to talk about propositions. He wrote: "Sellars is mistaken in thinking that ordinary event talk refers to propositional entities."[85] I don't know whether Sellars was aware of Vinci's criticism because his reaction to the state of affairs was almost simultaneous. Sellars response to these difficulties, as I understand it, is to push for a reconciliation between the sense-datum and the sensing (adverbial) theories--a thesis I am going to call the Equivalence Thesis. Meantime, others--oblivious to this move by Sellars--have either tried to defend a reformulated version of the adverbial theory (Tye);[86] or after having noted the weakening of the adverbial theory, have taken up the defense of the sense-datum theory (Casullo).[87]

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[82] Frank Jackson, "On the Adverbial Analysis of Visual Experience," Metaphilosophy 6 (1975): 127-135.

[83] Wilfrid Sellars, "The Adverbial Theory of the Objects of Sensation," Metaphilosophy 6 (1975): 144-160.

[84] Thomas Vinci, "Sellars and the Adverbial Theory of Sensation," Canadian Journal of Philosophy 11 (1981): 199-217.

[85] Ibid., 212.

Sellars move towards the Equivalency Thesis was first made in the Carus Lectures and followed up in "Sensa or Sensings: Reflections on the Ontology of Perception". The reconciliation is effected by changing the model for the concept of a sense impression. In his essay "Phenomenalism", he had argued that a theory of sense impressions has to be introduced by a model, and he opted for an adverbial theory. The model for sense data, as Sellars understands it, is a physical object and its properties. The model for the adverbial sensings is a person doing or suffering something: for example, a person waltzing. And these two models seem to give us two incompatible theories.

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[86] Michael Tye, "The Adverbial Approach to Visual Experience," The Philosophical Review 93, no. 2 (April 1984): 195-225.

[87] Albert Casullo, "A Defense of Sense-Data," Philosophy and Phenomenological Research 48, no. 1 (Sept. 1987).

To make his case for the Equivalency Thesis in "Sensa or Sensings", Sellars uses a dialectical approach. He introduces two characters, Jones and Smith, who respectively hold the sensa (sense-data) and sensing (adverbial) views. What Sellars does is transform each position through a number of steps to a common position.

First, both Jones and Smith agree that the analysandum for analysis are cases of opaque propositional perceptions, having the form: 'S sees that this D is f.' For example, 'Jones sees that this ice cube is pink.' And they agree that from a phenomenological or conceptual analysis point of view it would be correct to say of a veridical perception, such as, 'S sees that this is ice' that it requires a knowledge of causal properties, and these are not, in a strict sense, seen. So that it will be improper to say from a phenomenological perspective that physical things are seen. Rather what are seen are the properties of physical objects. And Jones and Smith try to formulate what they can agree to as a case of minimal seeing. They can agree that

"Something, somehow a cube of pink in physical space is present in the perception other than as merely believed in."[88]

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[88] Sellars, "Sensa or Sensings," 89, #26.

Second, they agree that the object of perception 'D' is believed in (rather than, strictly speaking, seen) or, put otherwise, it is taken that 'something is D'. The model for taking would be presupposition in Strawson's sense.[89] In other words, the subject of perception is assumed or presupposed to exist and to be correctly referred to. While it is that which is expressed by the predicate word or phrase that is believed about the subject of perception.

Third, they agree to an analysis of the common content of both veridical and unveridical perceptual reports. In order to be able to talk about the content of both veridical and non-veridical cases, Sellars introduces the category of ostensible perceptions, in which the achievement implication is neutralized.[90]. Thus, a neutral formulation would be: "P ostensibly sees a cube of pink facing him/her edge wise."[91]
This is intended to be equivalent to: "There appears to P to be a cube of pink facing him/her edgewise."[92]

The next step marks a radical shift. Sellars moves from an analysis of perception to its explanation. I say this is a radical shift precisely because classical sense-data theorists intended their theories to be analyses of perceptual experiences. But I have already expressed my disagreement with Sellars about that. But having disagreed with Sellars about the limits of analysis, does not preclude me from agreeing with Sellars about explanations.

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[89] Ibid., 87, #17.

[90] Ibid., 89, #29.

[91] Ibid., 89, #29.

[92] Ibid., 89, #29.

What Sellars is assuming, then, is that the sensa and sensing theorists are not in disagreement over the analysis of perception, but over the correct categorial expression of the ontological explanation.

Fourth, Jones and Smith

> agree that sensations are constituents of situations in which there appears to P to be such and such an object in front of him, and that the introduction of these items as having this status is a theory to be justified by its explanatory power.[93]

Fifth, they agree that "such phrases, involving verbal nouns, as 'a sensation', 'a thought', 'a feeling' are in some way derivative from the corresponding verbs, thus 'senses', 'thinks', and 'feels'."[94]

## 1. DISAGREEMENT

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[93] Ibid., 91, #33.

[94] Ibid., 91, #34.

The divergence between Jones and Smith comes over the explanation proposed to account for ostensible seeings, such as:

(1) P senses a red rectangle

Both agree that 'a red rectangle' does not refer to either a surface or anything in physical space. Sellars assumes that the concepts of physical objects and physical spaces entail concepts of causal properties.[95] And we have assumed that causal properties are not seen. At this point I have to break in to ask: if the causal properties are being neutralized why continue calling an 'ostensible seeing' of something 'physical'? Why not call the neutralized object of 'ostensible seeing' a sense datum? This is all that H.H. Price, for example, wanted for a sense-datum:

> What the red patch is, whether a substance, or a state of a substance, or an event, whether it is physical of psychical or neither, are questions that we may doubt about. But that something is red and round then and there I cannot doubt.[96]

I believe that Sellars hasn't resolved this difficulty.

In any case, Jones' and Smith's disagreement is about the correct categorial form of the theory of sense impressions. Jones claims that (1) has the form

'xVy'

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[95] Ibid., 96, #47.

[96] H.H. Price, Perception (London: Methuen & Co., 1932), 3.

['x' represents some person; 'V' is the transitive verb 'senses'; 'y' represents 'a red rectangle', which is construed as a referring expression]. This logical form is to be represented by the following convention:

(1A) P senses an $^s$(red rectangle).

Jones now stipulates (by definition) that (1A) entails:

(1A-1) (Ex) $^s$(red rectangle)x · senses (P,s).

Smith, by contrast, claims that (1) has the form

'P Adv V'

['P' represents some person; 'Adv' represents 'a red rectangle', which is construed as an adverbial phrase; 'V' is the intransitive verb 'senses'].

This logical form is to be represented by:

(1B) P (a red rectangle) senses.

which by stipulation entails:

(1B-1) (Ex) x (red rectangle) senses.

## 2. MOVES TO RECONCILIATION

Smith, in an irenic mood, noting the possibility of a move from

(2) P dances a waltz.

to

(3) A waltzing is taking place.

On this model he accepts a move from (1) to

(4) A (red rectangle)ing is taking place.

and hence to

(1A-2) There is an $^{s}$(red rectangle).

Jones responds that on this logic Smith should also accept the entailment from (1A) to

(5) P $^{s}$(red rectangle)s.

And Smith agrees. That is to say, for Smith ' $^{s}$(red rectangle)' is a verb modifier.

Sellars then presses Jones with the model of a sense datum being the seeing (in the achievement sense) of a physical object such that

P sees D, sees of it D', and sees D' to be F.

Sellars is introducing the distinction between seeing as which is achievement neutral, and the achievement sense of seeing to be. If Jones and Smith have agreed on a phenomenological reduction of perception to the level of 'ostensible perception', then it means they have neutralized the achievement sense of perception. And the form expressed by (1) is achievement neutral, and analogous to a seeing as. But, on the other hand, as a theoretical explanation the sensing is to be understood by analogy to the achievement sense as a non-epistemic seeing.

Sellars points out that Jones does not sense his sensum as a sensum. To say that this must take place would entail accepting the propria persona principle (the myth of the given), which he has rejected. Should we then say the same thing about the 'phenomenal properties', namely that we do not necessarily sense them _as_ phenomenal?[97]

> But if, even within the model, we can distinguish items which, though naturally _taken_ to be facing surfaces of physical objects are, with respect to what is seen _of_ them, simply rectangles of red and cubes of pink, then phenomenological analysis has made available a _neutral_ sense of 'red rectangle' which is available for use in his theory.[98]

This is a significant move. Ontological commitment resides in the subjects of (opaque) propositional perceptions. These are presupposed to be things with causal properties. Sellars is, however, conceding a neutrality to such things as a volume of pink, or a pink expanse. This is so because phenomenological reduction has turned such subjects into variables, so that

> the resources of the _first_ type [concepts of occurrent sensible properties] can be said to be constant, those of the second type [kinds of objects and causal properties] change.[99]

and,

> [The Manifest Image] combines a restricted and fixed domain of concepts pertaining to occurrent perceptible properties with a changeable domain of thing kinds and causal properties.[100]

To reconcile Jones and Smith, both have to agree to neutralize the subject terms of their respective theories.

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[97] Ibid., 95, #44.

[98] Ibid., 97, #50.

[99] Sellars, "Is Scientific Realism Tenable?" #43.

[100] Ibid., #45.

This is, I take it, the turning point in Sellars' analysis. He is accepting a neutralized form of sensing, such that it is improper for Jones to say that he is sensing a phenomenon, and for Smith to say that the sensing is modifying a person. They agree to neutralize the nature of the subject of the phenomenal properties. They agree that "it is this 'something somehow' which they have been attempting to flesh out by a theory of visual sensations."[101]

## 3. THE RESOLUTION

The irreconciliation between Jones and Smith rests on their models. Jones is committed to the model of physical objects as the objects of sensing, while Smith is committed to the model of a human being as the subject of sensing.

> it is difficult to see how the gap between Jones' sensa which are tied to perceivers by causal ties and Smith's objectless sensings, which are logically tied to perceivers, can be bridged.[102]

To get around the gap, Sellars suggest that both Jones and Smith could adopt a third model of sensing, and try to reformulate their respective claims in this third model. Instead of using the model of subject bound verbs which both Jones and Smith have been invoking, the new model is to use subjectless verbs instead:

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[101] Sellars, "Sensa or Sensings," 98, #53.

[102] Ibid., #78.

> Many philosophers have attempted to use another category of verbs as their model, namely those verbs which have no subjects--or, better, take such strange subjects as 'it'. Consider the verb 'to thunder'. Except in a metaphorical sense nothing thunders . . . There are sounds in *physical* space which, produced by *physical* objects, are not themselves 'physical objects' as specified by philosophical paradigms.[103]

Using the model of 'it thunders', Smith can substitute for the subject in

> P $^{s}$(middle C$^{\#}$)s

the subject of the model 'it', getting

> It $^{s}$(middle C$^{\#}$)s.[104]

Once this is accepted by both Smith and Jones, their appeals to physical objects and persons as models is neutralized, their positions becomes equivalent save for a terminological distinction. They can both agree to the following:

> when there appears to P to be a physical object with a red and rectangular facing surface:
> (a)
> There is a *sensum* or *objectless* *sensing* which is an $^{s}$(red rectangle) or $^{s}$(red rectangle)ing;
> (b)
> P is aware of (conceptually refers to) this *sensum* or *sensing*;
> (c)
> P *mis*takes this *sensum* or *sensing* to be the red and rectangular facing surface of a physical object.[105]

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[103] Ibid., 106, #81.

[104] Ibid., 107, #82.

[105] Ibid., 111, #94.

This equivalence is made possible because the concept of a physical object makes uses of causal properties, while the concept of a property does not.[106] This is a crucial point because the concept of a physical object in phenomenological reduction becomes a variable, while the concept of an occurrent property remains invariable, as is clearly expressed in following passages:

> if we look at these two these two types of conceptual resource belonging to the framework of perception, we notice that whereas the resources of the first type [i.e., concepts of occurrent sensible properties] can be said to be constant, those of the second type [i.e., concepts of physical objects] change.[107]

Both the adverbial and the sensa theories are, so to say, theory laden with an appeal to persons and physical objects respectively. And these appeals can be neutralized by using the model of a subjectless report such as 'it thunders'. The result is that "Jones' sensa which are tied to perceivers by causal ties and Smith's objectless sensings, which are logically tied to perceivers, can be bridged."[108]

To justify this move, Sellars says that this is part of a "revisionary metaphysics, a revision within the manifest image--that it is a constituent of P as seen by a revisionary eye."[109]

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[106] Sellars, "Is Scientific Realism Tenable?" #42.

[107] Ibid., #43.

[108] Sellars, "Sensa or Sensings," 105, #78.

This seem odd from my perspective since I allow processes (events) as described by 'it thunders' as part of the common sense framework.[110] However, Sellars does not have that option. He has defined the Manifest Image as based on substances, so that the acceptance of events is either an addition or a revision of the Manifest Image.

What do I make of Sellars' Equivalence Thesis? I have already given my reasons for thinking that such neutral sensa are available to conscious awareness through perceptual (phenomenological) reduction. What Sellars' reasoning shows is that sensa (sense data) are also sensibilia, which, according to Russell, are "those objects which have the same metaphysical and physical status as sense data, without necessarily being data to any mind."[111]

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[109] Ibid., 107, #82.

[110] See my criticism of the Manifest Image in chapter 2.

[111] Bertrand Russell, "The Relation of Sense-Data to Physics," in Mysticism and Logic (New York: Doubleday Anchor Books, 1957), 143.

# CHAPTER 10

# ANIMAL REALISM

The position I want to defend will be called Animal Realism. Since it has an analogy to theory construction, it could also be called Theoretical Realism. It could also be called Representative Realism, but I avoid calling it so because of the misleading connotations of the term 'representation' suggesting a copy theory. Animal Realism is the view that the 'cognitive' building blocks of a conceptual framework are, what have been variously called, 'ideas', 'sensa', 'sense data', 'sensibilia', 'qualia', 'essences', and probably in some uses 'stimuli'. Specifically my claim is that the Common Sense Framework is a rather rigid theory (in an extended sense) about sensa. From a structural point of view, Animal Realism has a common component with the positions which Sellars calls Hypothetico-Deductive Realism and New Phenomenalism[1], and which Cornman calls Theoretical Phenomenalism.[2] The distinction between my position and these is that these positions ultimately take an instrumentalist view of theories, while I take a realistic one. I claim that not all theoretical entities are either eliminable or reducible to sensa. This entails that the postulates of a theory may name and describe reality.

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[1] Wilfrid Sellars, "Phenomenalism," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963): 85.

[2] James Cornman, Perception, Common Sense and Science (Yale University Press, 1975): 125.

However I also want to say that the Common Sense Framework, though an adequate 'theory' for practical purposes, is not an adequate theory for truth. This is exactly Sellars' position except for the use of "theory" (Sellars would say here "conceptual framework"). The more adequate theory for describing and explaining what exists----and here Sellars' and my view coincide--is the conceptual framework of the Scientific Image. But immediately I will qualify my claim by saying that from my perspective the Scientific Image gives a more adequate description of the materials of the world, and a better non-teleological explanation of the world. This leaves out of consideration human artifacts which include such things as tables and social institutions--all of these are understood through a knowledge of the purposes they serve; and are, therefore, teleologically constituted. But perhaps Sellars is conscious of this when he writes cryptically that the Scientific Image must be supplemented with practical discourse. I take this to imply that a teleological framework has to supplement the non-teleological framework of the Scientific Image. If that is what Sellars means. then there is a superficial coincidence between my view and Sellars'.

The difference between us then becomes this. Sellars refuses to call the Common Sense Framework (his Manifest Image) a theory. He does this because the only possible candidate for the Manifest Image to be a theory about would be the manifold of sensa. But these are epistemically unavailable in Sellars' view prior to the possession of a public language; consequently, for Sellars, there is nothing for the Manifest Image to be a theory about.

## I. CORRESPONDENCE RULES

I find Sellars' discussion of correspondence rules to be a key to the relation of the Manifest and the Scientific Image, but unfortunately his discussion of correspondence rules is both sketchy and obscure. However the difficulty in understanding Sellars may be due to a failure on my part, but it also could be an obscurity on Sellars' part--resulting from trying to be consistent with other principles of his philosophy. In any case, I am also surprised that Sellars' commentators on correspondence rules write as if Sellars' position were clear. When reading them I get no further understanding than reading Sellars himself because all they seem to be doing is repeating Sellars' obscure formulas without further explanation. This seems to be true of the expositions of

Gary Gutting, Joseph Pitt, and C. F. Delaney.[3] The other type of commentary that does offer an interpretation of Sellars' correspondence rules is that of William Rottschaeffer.[4] The trouble with his interpretation is that it saddles Sellars with what seems to me to be a false consequence, which is

> Sellars is, indeed, still burdened with an empiricist doctrine that what-is is what can be or is perceived. As a result in the long-run there are no inferred or unobservable entities in Sellars' ontology. There are no factual truths other that perceptual truths, and meaning is ultimately gained in perception. For in the long run there is only one mode of knowledge, perception.[5]

I believe that this is a misunderstanding not only of Sellars but of empiricism as well. As far as empiricism is concerned, it is true that for this view it is sufficient for saying that something exists if it is sensed, but this is not a necessary condition for existence. Recall that the necessary conditions for something being a material existent for Sellars is that the thing be in space and time and have causal properties.[6] These conditions do not mention perception. Now if it were true that that which was sensed did not have causal properties, then by the empiricist doctrine it would still be proper to say that the sensed thing exists, but it would be improper to say on this basis alone, by Sellars' definition, that a material things exists. If the sensed entity is taken not to have causal properties, it would then be more appropriate to become an Epiphenomenalist rather than an Extreme Materialist.

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[3] Gary Gutting, "Philosophy of Science" in The Synoptic Vision: Essays on the Philosophy of Wilfrid Sellars, ed. C.F. Delaney, et al., (University of Notre Dame Press, 1977). Joseph Pitt, Pictures, Images and Conceptual Change (Dordrecht: D. Reidel, 1981). C.F. Delaney, "Basic Propositions, Empiricism and Science," in The Philosophy of Wilfrid Sellars: Queries and Extensions, ed. Joseph Pitt (Dordrecht, Holland: D. Reidel, 1978): 41-56.

[4] William Rottschaefer, "Ordinary Knowledge and Scientific Realism," in The Philosophy of Wilfrid Sellars: Queries and Extensions: 135-162.

[5] Ibid., 149.

However, the issue of what exists is a different problem from how knowledge of existents is obtained or tested. And it is true that, in some sense, both acquisition of and testing of our knowledge of what exists does require perception. But Rottschaefer has somehow scrambled the ontological and the epistemic distinctions, with the consequence that he attributes to Sellars Berkeley's idealistic formula: esse est percipi. And the root of the misunderstanding is, I suspect, his misunderstanding of Sellars' writings on correspondence rules.

Thomas Russman has also misinterpreted Sellars by concluding that Sellars resolves the mind-body problem by "eliminating the mind or introspectible mental occurrences."[7] But I will not examine his reasoning for this paradoxical conclusion.

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[6] See above chapter 1.

I don't know if I understand Sellars' position on correspondence rules well enough, but I will try to go beyond rehashing Sellars, on the one hand; and I will try to avoid saddling Sellars' with an absurdity, on the other hand.

Talk of correspondence rules is introduced to bridge the language of observation and the language of theory. Correspondence rules in this broader sense are rules correlating theoretical predicates with empirical predicates. Within this broader classification we can distinguish . . . substantive correspondence rules and methodological correspondence rules.[8]

The very first thing to note is that a correspondence rule is some kind of correlation. Now a correlation, if it is not accidental, will either be a functional relation as in the Charles-Boyle Law which relates the three properties of gases: volume, pressure, and temperature; or the correlation may be a (broadly) causal law which relates events in time. And these two types of correlations may be expressed by either statistical or deterministic laws.

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[7] Thomas A. Russman, "The Problem of the Two Images," in The Philosophy of Wilfrid Sellars: Queries and Extensions, 90.

[8] Wilfrid Sellars, "Theoretical Explanation," in Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967): 149-150.

In the case of methodological correspondence rules, for Sellars, there seems to be a correlation between a theoretical cause and an observable effect. The example Sellars gives is:

> Spectroscope appropriately related to gas shows such and such lines <---> Atoms in region R are in such and such a state of excitation.

['<--->' stands for a correlation]

It is clear that Sellars intends us to understand that the state of atoms is region R is a cause of the appearance of the lines as seen or photographed through the spectroscope. Sellars points out that the details of the causal relation may not be known in detail.[9]

Substantive correspondence rules correlate an empirical law with a theoretical law. This is illustrated by:

> Temperature of gas in the region R is such and such <---> Mean kinetic energy of molecules in region R are such and such[10]

Here the correlation is between the Charles-Boyle Law and the kinetic energy of molecules. Sellars does not explain himself, but I take it that temperature is operationally defined by a thermometer or a thermocouple reading. If the temperature is being measured by a thermometer, then we have a situation where the liquid in the thermometer as a result of being placed in a gas that has higher kinetic energy is causing the volume of the liquid in the thermometer to expand. And there is direct calibration of the relationship between the volume as registered by the thermometer and the temperature.

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[9] Ibid., 336.

[10] Ibid., 335.

I have a difficulty with this example because 'temperature' seems to be a theoretical term. When I look at a thermometer all I see is where the top of the liquid is relative to the scale on the glass of the thermometer. And on the basis of a theory of the instrument I infer that whatever the thermometer was placed in had such and such a temperature. But the word 'temperature' is here playing the part of a variable which stands for the cause of the thermometer acting as it does. And, of course, I know also what this unknown cause does to me--the higher the temperature the more uncomfortable I get, and at some point in some circumstances, it causes me to sweat, or to feel pain, or to be burned. Now if a substantive correspondence rule is meant to correlate observational and theoretical predicates, and this is an example of this, then the example is a poor one because what it does is correlate two theoretical predicates.

However my interpretation is trading on an ambiguity in the term 'observation' as is pointed out by R. Carnap

> A philosopher would not consider a temperature of, perhaps, 80 degrees centigrade, or a weight of $93^1/2$ pounds, an observable because there is no direct sensory perception of such magnitudes. To a physicist, both are observables because they can be measured in an extremely simple way.[11]

Sellars is mindful of this ambiguity when he writes that "it is not absurd to speak of observing viruses and protein molecules through an appropriately constructed electron microscope."[12] However if this use of 'observation' is not restricted in some way, then any perception of some symptom or effect of some event can be construed as seeing the event itself. For example, a person, by this usage, could say that he sees a fire because he has spotted smoke; or that he sees an airplane because he sees something in the sky which looks like a dark speck.

Regardless of the use of 'observation' to include both 'primary' and 'secondary epistemic seeing' (as Dretske calls them)[13], Sellars also distinguishes a subset of substantive correspondence rules--inter-theory correspondence rules--which relate theoretical laws with other theoretical laws, e.g., chemical and physical laws. I take it the correspondence is between a molecule in chemistry and the constituent atoms and/or subatomic particles of physics. So if the term 'observation' is taken in the narrow sense, as I have, then the temperature/kinetic energy case is an example of this kind of theoretical substantive correspondence rule. But the intention in introducing substantive correspondence rules is to correlate the objects of the observational domain with the objects of the theoretical domain. And although I believe the above example fails to illustrate this for the narrow sense of 'observation', identifying water with $H_2O$, however, does illustrate it. Substantive correspondence rules are then interpreted by Sellars as formulas for a possible replacement of the observational language by a theoretical one. He thinks it is possible to make "observational predicates into definitional abbreviations of complex theoretical locutions."[14] His prescription applies to 'water' as an abbreviation for '$H_2O$';[15] and even more so it applies to 'aspirin' as an abbreviation for 'acetylsalicylic acid', which in turn is an abbreviation for the formula '$CH_3COOC_6H_4COOH$'. Sellars goes on to say that "substantive correspondence rules are anticipations of definitions," and the "only alternative to this conception in the instrumentalist conception."[16] He does not prescribe adopting these definitions yet--not because it is impossible to do so, but because science is still developing; which means that better formulas are still possible. So his recommendation is to wait:

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[11] Rudolph Carnap, An Introduction to the Philosophy of Science, ed. M. Gardner (New York: Basic Books, 1966): 125.

[12] Sellars, "Theoretical Explanation," 141.

[13] Fred Dretske, Seeing and Knowing (Chicago: University of Chicago Press, 1969), 78, 153.

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[14] Ibid., 155.

[15] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981): II, #93.

> substantive correspondence rules are anticipations of definitions which it would be inappropriate to implement in developing science, but the implementation of which in an ideal state of scientific knowledge would be the achieving of a unified vision of the world in which the methodologically important dualism of observation and theoretical framework would be transcended, and the world of theory and the world of observation would be one.[17]

As far as I am aware, saying '$H_2O$' or 'sodium chloride' instead of 'water' and 'salt', respectively, is not only a possible linguistic practice, but it is one which is used now to some extent, and it seems to be appropriate in technical contexts, such as in a chemistry lab. And as far as I can see, this is all that Sellars could possibly mean by viewing substantive rules as candidate redefinitions of observational terms. Replaceable observation terms must be restricted to talk about the materials which organisms and artifacts are composed of. It cannot be a language which can be substituted for artifacts such as cars and tables--

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[16] Sellars, "Theoretical Explanation," 155.

[17] Ibid., 155. See also Carnap, Introduction to the Philosophy of Science, 238.

to say nothing of social institutions. The language of artifacts is tied essentially to functions and human purposes. Another way of saying this is that the language of artifacts involves practical talk. And practical talk is for Sellars, as was mentioned, something that has to be added--not substituted for--theoretical scientific talk.

Given this construal of what Sellars means by the replaceability of theoretical language for the observational language, this leaves out of account the methodological correspondence rules as rules for inferring the presence of theoretical entities. In other words substantial correspondence rules allow for replacement of a segment of observational language, while methodological correspondence rules sanction inference to the existence of theoretical entities.

Given this reading of correspondence rules, very little follows about actual or possible replacement of the observational language. On my reading, only the materials of the Manifest Image are subject to replacement. But everything else remains intact. If Sellars intends to claim more than this, then he hasn't made it clear to me what he does mean.

Let me ask the following question. What is the relation between a substantive and a methodological correspondence rule? And it strikes me that the two can be made equivalent. This is to say that for every observation of a physical thing, there is some causal explanation which a methodological correspondence rule will express; and for every methodological correspondence rule there is some observation (in the broad sense) that will be about the cause.

However, the core issue about observations is being evaded by talk of correspondence rules while using the term 'observation' in this theory-laden sense. There are two more basic uses of the term 'observation' than this. The first more basic sense is the case of 'primary epistemic seeing' in which we simply report seeing a physical object as having such and such a primary or secondary quality (in Locke's sense). And the other kind of observation is the rock bottom sense of 'observation' in which, as Sellars would put it, I see a volume of pink stuff. When the question is raised whether observational reports can be replaced, I think of these two types of observations, and not the cases of 'secondary epistemic seeing' which Sellars seems to be considering. Now, although theoretically it is possible that we could react in some way differently to stimuli or sensa other than by seeing physical objects, if that happened such perception would be disastrous for survival. So from the evolutionary perspective I don't think it is possible to perceive the world other than composed of physical objects. This applies, I believe, to all higher animals. As concerns the perceptions of persons, I would say that Kant's transcendental argument for the possibility of objective experiences requires that we perceive physical objects. As to the perception of sense data, which are no more than Sellars' volumes of colored stuff, Sellars himself talks about the concepts of 'occurrent sensible properties' as 'constant'.[18]

My strongest reason for thinking that our perception of physical objects cannot be altered is that I believe our concept of a physical object is supervenient on an rs-concept of a physical object. And rs-concepts are involuntary products determined by an innate and environmental interplay.

But if what I claim about the perception of physical objects is the case, then there is no way to alter our rs-concept of a physical object. This does not mean that we cannot alter the conceptual accretions to our rs-concept of a physical object. But Sellars writes that (i) we can alter or eliminate our conceptual framework:

> According to the view I am proposing, correspondence rules would appear in the material mode as statements to the effect that the objects of the observational framework do not really exist--there are no such things. They envisage the abandonment of a sense and its denotation.[19]

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[18] Wilfrid Sellars, "Is Scientific Realism Tenable?" Proceedings of the Philosophy of Science Association 2 (1976), #42-43.

[19] Wilfrid Sellars, "The Language of Theories," in Science, Perception, and Reality (London: Routledge and Kegan Paul, Ltd., 1963), 126, #52.

> one framework is, with appropriate adjustments in the larger context, replaceable by the other--eliminable in favor of the other. The replacement would be justified by the greater explanatory power of the new framework.[20]

Specifically, (ii) we can alter our conceptual framework by a conceptual retraining. I find both these claims difficult to understand, unless the scope of his discussion covers only the sorts of cases I have considered above. So let me get to the root of the difficulty. The difficulty can be expressed by the problem of locating colors in the scheme of things.[21] Colors are, on Sellars final view, identified with sensa. And the explanation for why we think we see colors as properties of physical things is that we, so to say, superimpose sensa on physical objects. The result is a visual illusion.

> physical objects aren't really colored; colors exist only in the perceiver', and that 'to see that he facing surface of a physical object is red and triangular is to mistake a red and triangular sense content for a physical object with a red and triangular facing side.

Sellars is correct in describing this as a mistake for an ordinary person who would, if asked to explain where he thinks the color of a red apple really is, reply 'out there where the apple is'. But there need be no mistake for someone who is aware that he is suffering an illusion. Such a person may say, for example, while looking at a drawing of the Muller-Lyer illusion, "The lines do not look parallel, but I know they are." He has made no mistake, despite seeing an illusion. By parity of reasoning, in the case of colors, a person may say, "the red looks like it is where the apple is, but I know that cannot be the case". And no mistake has been made.

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[20] Wilfrid Sellars, "Foundations for a Metaphysics of Pure Process: The Carus Lectures," The Monist 64 (1981), 55, #95.

[21] See Jay Rosenberg, "The Place of Color in the Scheme of Things: A Roadmap to Sellars's Carus Lectures," The Monist 65 (1982): 315-335.

Sellars is claiming that the Manifest Image is false simply because in it secondary qualities like colors are attributed to physical objects. And from a theoretical perspective we know that physical objects are out there and colors are somewhere in the region of our brains. So that the superimposition or supervenience of colors on physical objects is a mis-categorization. This is clear. And I accept this. The result is that we live in a sort of illusion--though an illusion that serves well our practical purposes. I also take it that Sellars thinks that this illusion is somehow a product of linguistic training. And if it is then it can be replaced by a different linguistic training--a training to be specified, I take it, by correspondence rules.

I disagree. I don't see how a recategorization or reconceptualization can get rid of the illusion. I don't think that it is the case that our illusion is the result of linguistic training; it is the result of a pre-linguistic and innately guided response to the environment which results in an animal representational system. Sellars anticipates something like this move and calls it

> the bastard notion of a pre-conceptual awareness of items as being red and triangular which is supposed to be the language independent foundation on which the meaningfulness of language rests.[22]

I do interpose a pre-conceptual representational system, but it does not explain the conceptuality of a conceptual system (as Sellars suggests), it rather imposes a core to conceptualization, but otherwise leaves conceptualization unrestricted as to further--shall I say--overlaying of concepts.

Sellars at this point in his philosophical development had apparently not made the reflective distinction between a representative system and language (as he does in "Mental Events"); or if he did, he made nothing of it--so that my view is not entertained at all.

## II. THE GAP: SEEING PHYSICAL OBJECTS

It is significant that Sellars assumes the existence of a Behaviorese language for the mythical Ryleans, and does not try to explain how it was possible for them to acquire it. This approach hides the existence of a problem. The problem is that Behaviorese takes it for granted that people can recognize physical objects. But how is it possible to recognize them? Sellars' answer is that a necessary condition is the possession of a concept of a physical object. But let's push it one step further by asking: How is it possible to acquire the concept of a physical object in the first place?

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[22] Wilfrid Sellars, "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation," in Philosophical Perspectives (Springfield, Illinois: Charles Thomas, Publishers, 1967): 171.

The question I am raising is really the question: How is language possible? And Sellars' broad answer is: by a process of natural and social evolution.[23] But more specifically, what would such a process require? His answer here is that one first has "To learn pattern governed behaviour" by being "conditioned to arrange perceptible elements into patterns and to form these, in turn, into more complex patterns and sequences of patterns."[24] What are we to make of this? What are these "perceptible elements"? Does he really mean "sensible elements"? And is the learner being passively impressed, or is the learner actively selecting or constructing a structure? And if there is an evolutionary process at work, what are the species specific capabilities or tendencies that are at work?

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[23] Wilfrid Sellars, "Some Reflections on Language Games," in Science, Perception, and Reality, 326.

To get a handle on an appropriate approach, let us ask ourselves what Sellars' answer could possibly be from the perspective of his Scientific Image. Sellarsian theory of Methodological Behaviorism must surely be a part of his Scientific Image. This is to say that a sophisticated behaviorism will take stock of the best ontology available to science, and use it to provide an account of learning about physical objects. Sellars introduces 'sensa' as theoretical entities to explain (conceptual) perception. They are, however, introduced as non-conceptual states, and are not the objects of sense cognition.

> It is, indeed, true, from the standpoint of this sophisticated framework that when a person sees that a physical object is red and triangular on the facing side, part of what is 'really' going on is that a red and triangular sensum exists where certain micro--theoretically construed cortical processes are going on.[25]

Assuming that this is the case, my question is: If sensa constitute the elements of the sensorial field, and all empirical knowledge is somehow causally grounded on them, still how is it possible to learn Behaviorese? As far as I know, Sellars never addresses himself to this question. At best we can speculate on a possible answer.

So how can we breach the gap between the ontology of the Process Ontology, which is a Heracleitean flux of absolute processes, and the Behaviorese of the Rylean lan-

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[24] Ibid., 327.

guage? But the problem is even more basic. We attribute to animals the ability to rs-see physical things. How do we explain this? The gap must be filled by some theory of Representational Systems, RS.

Learning (unconsciously) about physical objects, for Sellars, consists minimally of patterning sensa by 'logical construction' in such ways as schematically specified by the 'logic of complex particulars' of the Process Ontology.[26] But if animals are credited with rs-seeing physical objects, either they too use 'logical construction' on sensa, or something else-- let's call it Humean (hypothesis) construction by analogy with Humean inferences. I will assume the latter. So if animals are able to rs-see physical objects, this suggests that our concept of a physical object is a sophisticated supervenience on an rs-concept. But an rs-concept cannot be a logical construction since animals, by assumption, lack a logical vocabulary. So there must be a more sophisticated construction by human beings which employs logical operators. But if this logical construction of a physical object out of sensa is introduced as a theory to explain perception, then Sellars is committed to the postulation of not only rs-concepts, but more sophisticated ur-concepts to pre-linguistic people, prior to the acquisition of a lin-

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[25] Wilfrid Sellars, "Particulars," in Science, Perception, and Reality, 103.

[26] See Wilfrid Sellars, "On the Logic of Complex Particulars," Mind 58 (1949): 306-38.

guistic concept of a physical object. The upshot is that Sellars seems to be committed to an innate mechanism of perceptual structuring in terms of ur-concepts or rs-concepts independently of language. I don't see how Sellars can avoid these implication.

This outcome dovetails with the position of Richard Gregory (who cites Helmholtz as his predecessor). His position is that perception is an unconscious inference process that takes sensorial stimulations as data for the construction of a perceptual 'hypothesis.'[27] This is also G. Harman's position.[28] And it seems to have been also the position of Paul Feyerabend--a position which Sellars criticized in "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation."[29] The claim of these writers is that stimuli or sense data can be viewed as data requiring explanation, and perception is the hypothesis which explains the data.

The main objections to viewing perceptions as hypotheses is that there is a disanalogy between this use and ~~the normal or paradi~~gm use of the word 'hypothesis'. In the paradigm use, a 'hypothesis' is a statement which has a semantical relation to other statements which express awareness of data and evidence. This is to say that 'data', 'evidence', and 'hypotheses' are in the paradigm case all consciously entertained epistemic statements. Also, there is this disanalogy. If a hypothesis is disconfirmed it can be withdrawn; whereas there is no analogue for withdrawing a perception on the basis of disconfirming evidence. The conclusion reached, then, is that a perception cannot be a 'hypothesis' in the ordinary use of the term.

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[27] Richard Gregory, Eye and Brain: The Psychology of Seeing (New York: McGraw-Hill Book Company, 1966), 222.

[28] Gilbert Harman, Thought (New Jersey: Princeton University Press, 1973), ch. 11.

[29] Wilfrid Sellars, "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation," in Philosophical Perspectives.

But it can be replied that perception is not literally a conscious hypothesis, but something analogous which is sufficiently similar to warrant being called a 'hypothesis' in an extended sense. So what would be analogous if perceptions are viewed as hypotheses? The answer is that there are sense data and other perceptions to act as data and evidence analogues, and there is an analogous unconscious process of data recognition, hypothesis formation, and anticipation of new data as evidence. Viewing perception as hypothesis formation helps to explain how seeing as switches occur when viewing ambiguous figures such as, for example, Wittgenstein's drawing of a duck-rabbit. It also helps to explain how visual illusions are possible.[30]

Sellars would caution that such a use of 'hypothesis', which is an analogical extension of our ordinary term, requires a commentary as to which respects perception is like a hypothesis and in which respects it is not. But such a commentary has been provided above, so what would be further objections to calling perceptions hypotheses?

The objection to viewing perceptions as hypotheses may be the fact that such a thesis requires the positing of unconscious mental processes. But this is compatible with the Sellarsian theory of concept formation which requires a pre-conceptual period of conditioned learning in which observational sentences are paired with sensorial stimuli, which occurs at an unconscious level. Furthermore, if we reflect on how it is possible to distinguish items within the manifold of sense, a distinction must be made between relevant and irrelevant stimuli, and within the relevant between the essential and accidental ones. The relevant--irrelevant distinction may be identified with the Gestaltist foreground-background distinction, or an umbra-penumbra distinction. And then within the foreground another distinction can be made between essential and accidental stimuli. If these distinctions are not present, then it is inconceivable, for example, how for a perceiver a tree can be distinguished from the forest, and how a maple tree can be distinguished from an oak. In other words, a behavioristic theory must posit stimuli discrimination and stimuli generalization. The results of these innate mechanisms is a perceptual response. One reason for calling this response a hypothesis is, I take it, because it is malleable. As a result of more or new data perception changes. So the analogy between perceptions and hypotheses is that both are a function of new data. All this occurring on the unconscious level.

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[30] See Gregory, Eye and Brain.

Sellars provides further clues to his position in "Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation." While commenting on a paper by Paul Feyerabend, he categorically says that the Manifest Image is not a theory:

> And while I agree with Feyerabend that the conceptual framework of "common sense" is, in the last analysis, false, I find it confusing . . . to speak of this framework as a false theory.[31]

He adds, "the conceptual framework of common sense has no external subject-matter and is not, therefore, in the relevant sense a theory of anything."[32] He goes on to ask:

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[31] Sellars, "Scientific Realism or Irenic Instrumentalism," 158.

[32] Ibid., 159.

> What would the conceptual framework of common sense be a theory _of_? [and answers] A _trivial_ answer is, of course, available, namely, 'Common sense objects and events.' But this would be like answering the question 'What is atomic theory a theory of?' by saying 'Atoms.' A _false_ answer is also available, namely, 'Sense Impressions'.[33]

I see no reason for Sellars to object to this as a causal theory of perception. Commenting on Feyerabend's thesis that "the framework of physical objects is a theory _with respect to_ sense impressions," Sellars writes: "In _this_ sense, though not in the ordinary sense, the framework of physical objects _is_ a theory with respect to sense impressions."[34] His only reservation is this: "This conceptual framework, though _brought into play by_ sense impressions is not, at least primarily, _about_ sense impressions."[35] But this is no objection. After all a microtheory that posits electrons to explain oscilloscope patterns is not _primarily_ about the illumination of the oscilloscope--that would be explained by a theory of the oscilloscope--it is rather a theory about the _patterns_ of illumination. By analogy, the perceptual hypothesis would not be primarily about sense data but about the _patterns_ of sense data.

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[33] Ibid., 158-159.

[34] Ibid., 160.

[35] Ibid., 172.

The fundamental difference between Sellars' position and mine goes back to the issue of rs-concepts. Does a nonconceptual Representational System allow for the construction of a theory of the common sense framework? The consideration of this topic is undertaken in Sellars' essay "Phenomenalism". Since I am not defending Phenomenalism and am in agreement with Sellars' basic objections against it, the only part of this essay that concerns me here is his attempt to refute the initial argument for, what he calls, New Phenomenalism.

His counterargument is:

(A) If the relation of sensa to the common sense framework is analogous to the relation of observations to a scientific theory, then since the necessary condition for the latter is the availability of inductive (observational) generalizations, the necessary condition for the former is the availability of inductive generalizations of sensa.

(B) But such inductive generalizations about sensa are not available without the use of the language of physical things.

(C) Therefore, the relation of sensa to the common sense framework is not analogous to the relation of observations to a scientific theory,

The argument is valid. But it relies on the assumption that the premises and theoretical conclusion are to be formulated in a conventional language. Given this assumption, I have no quarrel with Sellars' position.

But Sellars is operating on a sophisticated level of communication, where it is appropriate to locate the object of reference in objective space. And he is thinking of securing this reference relative to a speaker. So he is assuming here that for objective generalizations and communication self-reference is required in discriminating and organizing sense contents. I am, however, concerned with a less sophisticated level of awareness, which we may share with animals, and which makes language and communication possible in the first place. It is a level at which discriminations occur not only of sensory qualities but also of groupings of sensory qualities. Quine refers to this as "qualitative spacing", and recognizes its innate status: "Needed as they are for all learning, these distinctive spacings cannot themselves all be learned; some must be innate."[36] Such a postulation of discrimination and grouping of sensorial qualities is a necessary condition for understanding how animals can get about in their environment and learn anything at all.

A Behavioristic theory assumes the innate capacity for forming stimulus associations and for stimulus generalization, and this is the type of generalization that suffices for my purposes. In addition I require an innate capacity for something like theory construction, and again a Behavioristic theory must assume the capacity of animals to respond to physical objects (or at least to sets of complex Gestalt phenomena) and not merely as phenomenalism would have it to atomic units. A 'theory' of physical things is, from this primitive perspective, a bundle theory in which qualities more or less coalesce, and in which such bundles interconnect. All of this is had, I surmise, at the animal level through a Representative System.

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[36] W.V.O. Quine, "Natural Kinds," in Ontological Relativity and Other Essays (New York: Columbia University Press, 1969), 123.

Sellars has an argument for premise (B). It is, however, couched on the conceptual level. After I state it I will transpose it to the Representational System level. The argument is this:

(1) Either the inductive generalizations about sensa are accidentally autobiographical (A-generalizations) or they are essentially autobiographical (E-generalizations).

(2) If they are A-generalizations, then the generalization:

Whenever (or for the most part whenever) I have such and such a pattern of sense contents, I have a sense content of the kind in question remains true if 'anybody' is substituted for "I".

(3) If they are E-generalizations, then the above generalization does not remain true if 'anybody' is substituted for "I".

(4) If they are A-generalizations, then they must include a reference to physical circumstances.

(5) If they include reference to physical circumstances, then appeal to A-generalizations begs the question.

(6) Therefore, only E-generalizations are available.

Let me first ask what is the point of this distinction between A- and E-generalizations? Although Sellars is not quite explicit on this, the way it makes sense for me is to interpret it along the following lines. The E-generalization is meant to apply to those cases where something is abnormal either about me or my circumstances. For example, suppose I have jaundice, then my visual generalizations about what I perceive may have many descriptions of things appearing yellow. In that case, although it may very well be the case that something yellow will be followed by something else being yellow for me, I cannot universalize my experience to be true for everyone; though I could generalize that this will be true for the most part for anyone who has jaundice. However such a generalization would require relevant public information. An A-generalization, by contrast, is made on the assumption that I and my circumstances are normal, and that what is true for me will be true for any normal person in normal circumstances. So, in any case, both generalizations presuppose knowledge of the public circumstances, and both kind of generalizations are implicitly relativized to states of persons and their circumstances.

Seen in this light, Sellars point is that any experiential generalization is determined by various factors about the person and his circumstances, and that a full understanding of why experiences come in the patterns that they do depends on understanding these conditioning public factors.

Any Reductive or Analytical Phenomenalism suffers shipwreck against this argument. The ability to predict which sensa will be consequent on which prior sensa requires a mention of the circumstances in a physicalistic language. Phenomenalism thus must either beg the question by appealing to a physicalist language which it claims can be eliminated; or, if it does not make such an appeal, it will fail to provide reliable generalizations.

I agree with all of this. But it is beside the point. The issue of whether "anyone" can be substituted for "I" does not arise for me because I am working at a level at which this distinction does not even have to be present.

Sellars, in his examination of Phenomenalism, interprets the claim that there are possible sense contents as involving a terminal statement of the kind: 'If I (who am in state T) do action A in circumstance C, then I may have sense content S′. This is too sophisticated. Certainly actions and circumstances will have an effect on the passing show, but abstracting the actions and circumstances, the passing show will still have some modicum of regularity. Of course taking into account actions and circumstances enhances the understanding of the regularity, but it is not essential to the discernment of minimal regularity. The Phenomenalist step need not be concerned with the conditions of the passing show, he need only discern fleeting or relatively stable patterns, and on this basis to anticipate further features.

Notice that Sellars does not deny the presence of generalizations. Without a knowledge of how circumstances determine the presence of experiences, the generalizations may not be very reliable. Suppose some person, S, is looking at a rolling red ball. The experience will (if it is objective) have some kind of regularity about it, despite unfavorable circumstances. Suppose that S is blinking or moving his head, then the experience will be of something disappearing and appearing or jumping from one area of one′s field of vision to another. Granted. Still there is regularity. This point was made by James Cornman in his essay "Theoretical Phenomenalism."[37] Although the so--

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[37] James Cornman, "Theoretical Phenomenalism," Nous 7 (1973): 120-38.

called E-generalizations are not strictly universal generalizations, it suffices that they can be probabilistic generalizations. The phenomenology of this kind of awareness is captured by Berkeley's and Russell's "bundle theory" of physical objects. What perhaps should be said is that physical objects are seen as bundles of sense qualities remembered, had, or anticipated. Initially, we may conjecture, these bundles have no determined regularity about their exact make-up: the bundles come in family-resemblances, and their interconnections have, if we use our perspective to describe them, at best, a statistical regularity.

Sellars response would be that all of this begs the question. The point at issue is whether it makes sense to speak about concepts without presupposing a battery of concepts which include those of physical objects. Sellars' attack rests on the assumption that we are working with conceptual cognitions, and that conceptual cognitions entail a language, and that a language can be learned only in a social context on the basis of a behavioristic learning theory.

Since I do not want to dispute this, I paraphrase the whole discussion to the level of rs-concepts. I am not claiming that physical objects are reducible to actual and possible sense contents, I am claiming that we have an rs-concept of a physical objects which is functioning analogously to a theoretical concept.

The question may then be raised: How is such a hypothesis constructed? One response is that this is an irrelevant question. How theoretical hypotheses in science arise is varied and at times quite mysterious. The claim is sometimes made that we 'infer' a hypothesis, but this is not quite right, or if the word 'infer' is to be retained, then different types of inferences have to be distinguished. It seems to me that theoretical hypothesis formation is akin to poetry in relying on an inspiration of an appropriate metaphor or analogy. Philosophers of science, including Sellars, talk about the heuristic value of models for theories. In other words, theoretical hypothesis formation is, if we are going to retain the word 'inference', inference to a model. But instead of 'inference', the words 'insight', 'intuition', 'illumination' seem more appropriate. Some cognitive psychologists describe pre-linguistic awareness as hypothesis formation in this sense. When, for example, R. Gregory talks about perception as hypothesis formation, he too is using 'hypothesis' in this sense. I suspect that a Gestalt is also a hypothesis in this sense. Now how are hypotheses of this sort constructed? I don't think anyone knows. If it were known, this would provide foundations for a logic or algorithm for discovery. But, for all I know, discovery is ultimately, as K. Popper contends, a trial and error sort of affair. But the ignorance of the manner of genesis of hypotheses does not preclude hypotheses from being justified for acceptance. So in the case of talking about the formation of physical object 'rs-hypotheses' or rs-concepts of physical objects, ignorance of their genesis is just as mysterious as is the genesis of any theoretical hypothesis.

Another response, one which may or may not be implicit in Sellars' position, is that the genesis of an rs-hypothesis is impossible--which is quite a different claim than saying it is mysterious.

## III. THE COMPUTER ANALOGY

I will approach this issue of rs-hypotheses of physical objects from the perspective of computer simulation. Sellars occasionally uses the computer as a model of language behavior.[38] He provides computer analogues for language entry, intra-language, and language-departure transitions, and he also provides a computer analogue for induction. We know that the difference between the conceptual and the non-conceptual is the availability or the unavailability of logical words for inferences, which make acting in accordance with rules possible. And once rules are mentioned we have to introduce a meta-language which duplicates the observation-inference-action transitions on its level. Also we must include various 'auxiliary positions'. He has also provided for names via a four-dimensional coordinate language, for spatial and temporal demonstrative expressions, and for various predicates in his computer analogy.

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[38] Especially Wilfrid Sellars, "Being and Being Known," in Science, Perception, and Reality, 51-52; and idem, "Truth and Correspondence," in Science, Perception, and Reality, 219-220.

The computer analogy, however, is inadequately formulated by Sellars to account for the perception of physical objects; and he has omitted from his computer analogy the distinction between two roles of logic. On the one hand the hardware of the computer is such that it has built-in logic gates. Without these there would be no computer. On the other hand there are various software programs, appropriately called 'languages', which contain their own logics, for example, the language BASIC. This distinction suggests two different ways that logic can play a role in behavior. On the one hand, the logic can exist without any language, and have a role in the unconscious and involuntary integration of sensations (sensa, qualia) resulting in the perception of physical objects. On the other hand, a logic (of a program language) can exist in a language, and be available to conscious and voluntary use.

Is this acceptable to Sellars? I don't know. Some of his claims are open to interpretation. Sellars distinguishes Humean inference from Aristotelian inference, and Humean inference can be viewed as weakened or truncated Aristotelian inference. But is there theoretical room for something in between--perhaps a less truncated form of Aristotelian inference? Why not something like Intuitionistic Logic? As I understand Sellars position, he grants animals at best simple associative mechanisms, such as associating a signal with food. But perhaps animal behavior could be understood in terms of acting in conformity to some specified logic (as opposed to being rule governed). This would enable an animal to ape much more human conceptual abilities.

## IV. ORDER OF BEING AND ORDER OF KNOWING

Sellars often makes use of the Aristotelian distinction between what exists and what is known to us. And he applies this distinction to the relation of thoughts to knowledge. He states that thoughts exist without being known; knowledge of them requires the conceptual apparatus of a language. If this is all that Sellars claims then there would be no essential controversy with innatism. But this formulation blurs the distinction between conceptual thoughts and rs-thoughts. It is clear that Sellars would grant human beings rs-thoughts independent of language, but it is not equally clear that he would not grant them conceptual thoughts independently of language. The claim that thoughts are ontologically prior to language may mean no more than that after a language is learned, a person acquires conceptual thoughts, and these as internalized are prior in the order of being from then on. On this interpretation we have to assume that the Ryleans in learning a public language at the same time (concomitantly) are learning to think conceptually. From this it would follow that there is no conceptual thinking prior to the learning of a language. The distinction between an ontological priority of thoughts becomes, at best, the claim that thoughts (qua neural patterns) are causally (though not genetically) prior to overt utterings. It becomes the claim that such neural patterns embody the dispositions to overt utterings. What Sellars would not be claiming, on this interpretation, is that in the order of being conceptual thoughts exist prior to the acquisition of a public language.

From this interpretation many of Sellars' claims follow: his claim that "the individual as a conceptual thinker is essentially a member of a group"[39]; and that "It is no accident that one learns to think in the very process of learning to speak."[40]

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[39] Wilfrid Sellars, "Philosophy and the Scientific Image of Man," in Science, Perception, and Reality, 17.

An alternative interpretation would be that Sellars is to be taken quite literally in saying that thoughts exist prior to language acquisition. But it may also mean that ur-conceptual thought exist independently of language learning. Perhaps this is all that Chisholm was claiming when he wrote to Sellars:

> Thoughts would be intentional even if there were no linguistic entities. (This is a sentence about psychology. I concede that if we had no language, our thoughts would be considerably more crude than they are.[41]

In his correspondence with D. Rosenthal, Sellars tries to reconstruct Chisholm's position in this way:

> My guess is that Chisholm so uses 'psychological' that it includes items which I would deny to be intentional (e. g. , sense impressions, tickles, pains, etc. )--cf. my discussion of the pseudo--intentionality of sense impressions in EPM. Unless I am very much mistaken, he thinks that they have intentionality, or confuses a broader sense of 'intentionality' in which a non-conceptual items can have intentionality, with a narrower sense in which they cannot.[42]

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[40] Ibid., 32.

[41] Chisholm to Sellars, "Intentionality and the Mental (Sellars-Chisholm Correspondence)," in Minnesota Studies in the Philosophy of Science, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, vol. 2 (Minneapolis: University of Minnesota Press, 1958), 533.

[42] Wilfrid Sellars to David Rosenthal, "The Rosenthal--Sellars Correspondence on Intentionality," in Intentionality, Mind, and Language, ed. Ausonio Marras, (Chicago: University of Illinois Press, 1972), 478.

It is not clear what Sellars is alluding to by 'intentionality in the broader sense. And it is still not clear to me what kind of thinking Sellars grants to pre--linguistic people and animals. My best guess is that he has in mind something like the 'logical' construction of physical objects out of sensa.

## V. LOGICAL CONSTRUCTION

The aim of logical construction was to provide a material equivalence between the analysandum and the analysans. But when we read Sellars on these matters he seems to be after something else. Suppose now that the analysandum is a 'theoretical construct' that is not equivalent to the analysans, but a theoretical superstructure that unifies the so called elements--what may be called a 'theoretical hypothesis'. If that is the case, then we can at most search for elements and unifying principles, and say they are the ingredients of the analysandum in some sense, but which do not exhaust its constitution.

On this alternative view, logical construction is not either a matter of same-level or different-level analysis, simply because it is not a matter of analysis, but of something else. It is more akin to saying that a cube of pink ice is identical to a swarm of molecules. It is a matter of cross-categorical correspondences.

# VI. UNALTERABILITY OF RS-CONCEPTS

I believe that there is a stratum of the Manifest Image consisting of the rs-seeing of physical objects which is an invariable achievement of normal higher animal life. If this is the case, then this may be an unalterable way of seeing. If we consider the relation of belief to seeing, we can note certain independencies. First consider the cases of visual illusions. Despite my sophistication and beliefs to the contrary, when I look at the various illusory pictures (Muller-Lyer, Hering, Pozo, Poggendorf, Necker, etc.[43] things still look as they are not. This suggests that there are ways of seeing that are independent of what one believes. This same independence is illustrated by the constancies of perception, which is the phenomenon that things tend to look normal despite various abnormal alterations (to a degree) in our visual environment. This ranges from seeing a white object as white in yellow illumination to the extreme cases like those experiments of Ivo Kohler with distorting goggles as, for example, inverting the visual field, so that everything initially looks upside down. What happens is that the wearer of such goggles eventually gets adjusted to the distortion and sees the world almost normally. The existence of these two classes of phenomena--visual illusions and visual constancies--suggests that our visual endowments are independent of our conscious beliefs.

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[43] Gregory, Eye and Brain, ch. 6.

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